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SEOUL 3

Dr. Emin Bey.

EMIN PASHA

IN

CENTRAL AFRICA

BEING A COLLECTION OF HIS LETTERS AND JOURNALS.

EDITED AND ANNOTATED BY

PROFESSOR G. SCHWEINFURTH; PROFESSOR F. RATZEL;

DR. R. W. FELKIN; AND DR. G. HARTLAUB.

With Two Portraits, a Map, and Notes.

TRANSLATED BY MRS. R. W. FELKIN.

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CONTENTS.

PAGE

INTRODUCTION BY R. W. FELKIN, M.D., F.R.G.S. ix

EMIN PASHA'S LETTERS AND JOURNALS.

I. FIRST JOURNEYS IN THE MÁDI COUNTRY, IN UNYÓRO, AND IN UGÁNDA.

1. From Ladó up the Nile to Dufilé, July 1877 (*Petermann's Mitteilungen*, 1878) 1
2. From Dufilé up the Nile to Magúngo on the Albert Lake, and subsequently *viâ* Kiroto and Masindi to Mrūli, August 1877 (*ib.* 1878) 10
3. From Mrūli to Rubāga in Ugánda, November 28 to December 18, 1877 (*ib.* 1878) 28
4. Diary of a Journey from Mrūli to the Capital of Unyóro, and Remarks concerning Unyóro and its People, September 13 to October 30, 1877 (*ib.* 1879) 50
5. A Description of the Wanyóro (*ib.* 1879) 73
6. Dufilé to Fatiko, December 27, 1878, to January 8, 1879 (*ib.* 1880) 98
7. On Trade and Commerce among the Wagánda and Wanyóro (*Ausland*, 1883) 111

II. JOURNEYS BETWEEN THE VICTORIA AND THE ALBERT LAKES.

1. A Visit to the Victoria Lake, February 13, 1878 (*Petermann's Mitteilungen*, 1880) 124
2. From Rubāga to Mrūli, March 28 to April 8, 1878 (*ib.* 1880) 128
3. From Mrūli *viâ* Fauvera to Magúngo, April 13–28, 1878 (*ib.* 1880) 135
4. An Excursion to Lúr, on the Western Shore of the Albert Lake, November and December 1879 (*ib.* 1880) . . . 140
5. A Sail upon the Albert Lake, 1885 (*Scottish Geographical Magazine*) 162

PAGE

III. The Monbuttu Country.

1. A Visit to the Monbuttu, 1883 (*Mitteilungen des Vereins für Erdkunde zu Leipzig*, 1887) 186
2. Notes on the Monbuttu (*L'Esploratore*, 1887). 202

IV. In the Country of the Bari and Latúka.

1. From Gondokóro through Tarángole to Agaru, March 31 to April 28, 1881 (*Petermann's Mitteilungen*, 1882) . . . 214
2. From Agaru through Fadibék to Fajuli and back to Fadibék, May 1881 (*ib.* 1882) 243
3. From Fadibék *viâ* Obbo to Labóre, May 1881 (*ib.* 1882) . 253
4. From Labóre *viâ* Fadibék to Fatíko, October 1880 (*Mitteilungen der K.K. Geog. Gesell.*, Wien, 1882) 258
5. From Fatíko to Fauvera and back, October and November 1880 (*ib.* 1882) 276
6. From Gondokóro to Obbo, March 29 to May 26, 1881 (*ib.* 1882) 289

V. Travels to the West of the Bahr-el-Jebel.

1. From Ladó, on the White Nile, through Nyambara to Kediba, in the Kederú Country, September 15-24, 1881 (*Petermann's Mitteilungen*, 1883) 299
2. From Kediba to Biti—Condition of the Amadi District, September 24-30 (*ib.* 1883) 307
3. From Biti to Bufi—The River Lau, October 9-11 (*ib.* 1883) . 317
4. From Bufi to Rumbēk, October 22 to November 12, 1881 (*ib.* 1883) 323
5. Rumbēk: The Agār and other Dinka Tribes, November 12-15, 1881 (*ib.* 1883) 334
6. Through the Territory of the Gōk to the River Roā, and back to the River Yalo, November 1881 (*ib.* 1883) . . 341
7. The Lori Country and the Upper Yalo as far as Sayadīn, November 1881 (*ib.* 1883) 351
8. Return March to Ladó, December 4-15, 1881 (*ib.* 1883) . . 354
9. From Bedén, on the White Nile, through Fajelú to Kakúak, October 9-17, 1882 (*ib.* 1883) 358
10. The Kakuák and Fajelú Countries, October 18-31, 1882 (*ib.* 1883) 366
11. Kabayendi and the Makraká (*ib.* 1883) 372
12. Through the Abaká Country to Gosa, November 3-17, 1882 (*ib.* 1883) 378

PAGE

13. From Gosa *viâ* Abukaya and Makraká-Sugaïre to Wandi, November 20–26, 1882 386

VI. On the Geography of Plants and Animals.

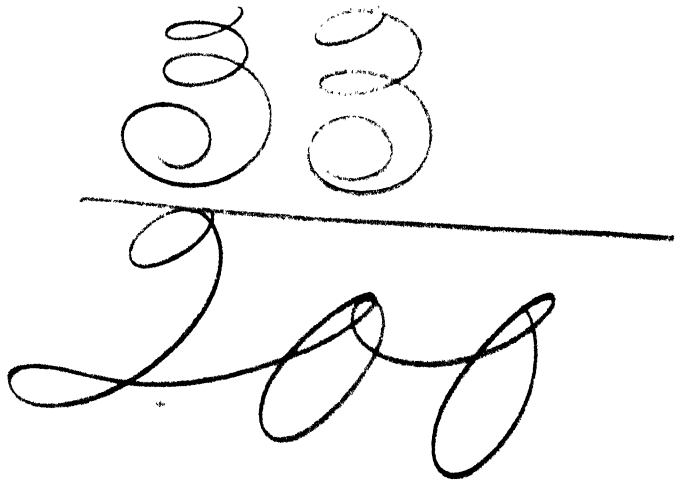
1. The Acclimatisation of various Domestic Animals in the Equatorial Nile Region (*Ausland*, 1882) 390
2. Zoo-Geographical Notes (*Mitteilungen des Vereins für Erdkunde zu Leipzig*, 1887) 391

VII. On the State of Civilisation and on Politics.

1. The *Zerîbas* in the Province of Rōl in 1881 (*Ausland*, 1882) . 408
2. On Exploration, the Labour Question, and Civilisation (*MSS.*) 415
3. On the Slave Question (*MSS.*) 420
4. On the Agriculture, Commerce, and Administration of the Equatorial Provinces (*MSS.*) 422
5. The Sudān and the Equatorial Province in the Summer of 1882 (*Ausland*, 1883) 432
6. Three Letters to Dr. G. Schweinfurth (*Mitteilungen des Vereins für Erdkunde zu Leipzig*, 1887) 438
7. Letters to Dr. R. W. Felkin 503

Appendix 512

Index and Glossary 523



LIST OF ILLUSTRATIONS.

PORTRAIT OF EMIN PASHA, FROM A PHOTOGRAPH BY M. L. P. VOSSION, TAKEN AT KHARTÚM, MARCH 1882 . . . . *Frontispiece.*

PORTRAIT OF EMIN PASHA, FROM A PHOTOGRAPH TAKEN IN GERMANY, 1875 . . . . . *To face page* ix.

MAP OF THE EQUATORIAL PROVINCE, BY E. G. RAVENSTEIN . *At end.*

200

INTRODUCTION.

THIS volume contains a collection of letters, and extracts from journals, which Emin Pasha has sent to various correspondents in Europe during his residence in the Egyptian Sudān.

As I have had the pleasure of personal acquaintance with Emin Pasha, and the advantage of travelling through a considerable portion of the country he has so long ruled, and have also been in continuous correspondence with him for the past nine years, the task of writing an introduction to the book has been entrusted to me ; and although this is a pleasant duty, it is yet an arduous one, for I find it difficult to say all I wish with regard to my illustrious friend, and yet at the same time to write in such a way as may be acceptable to him.

It must be borne in mind that Emin Pasha has no idea that these letters are being published in their present form. It may be well to explain here the reason for their publication. Until last year, Emin Pasha was a comparatively unknown man. A few scientists in Germany and in England alone knew of his existence and of the work in which he was engaged; but when, in the end of 1886, I received and published letters from him, saying that he still held the Equatorial Province of Egypt, and requesting help to enable him to maintain his post, interest was aroused in him, and his fame rapidly spread throughout the whole of the civilised world.

Help, too, was soon forthcoming. I proposed that an expedition should be sent to his relief, and the Royal Scottish

Geographical Society petitioned Government to assist them in equipping one. The project, however, was not destined to be carried out by them, for the Government gave their consent to a scheme organised by Mr. W. Mackinnon of Ballinakill, who, in conjunction with several of his friends, sent out an expedition under Mr. Stanley in January 1887, a sum of £10,000 being subscribed towards it by the Egyptian Government.

In order to satisfy the desire expressed by Germans to know more of their countryman, Professor Ratzel of Leipzig and Professor Schweinfurth of Cairo undertook to publish a collection of Emin Pasha's letters, feeling that this was the best way of making him known; and it is in consequence of the interest felt in him in our own country, that the publishers of this English edition are induced to present a translation of the German work to the British public. It is hoped that it will meet with that appreciation which the letters and journals deserve, full as they are of interesting details concerning the geography, botany, zoology, and, above all, the ethnology of the very heart of Africa, and dealing, as they do, with a desperate struggle for liberty and civilisation, carried on single-handed by a European, within the stronghold of slavery and barbarism.

As I have often been asked, "Who is Emin Pasha?" I will quote a few sentences about his past life from the Introduction to the German edition of this book:—

"It is not our intention to give here a biography of this important man; his name belongs to the history of our times, and his work is, please God, not nearly finished. Emin Pasha forms at the present time the central point around which all the interest in Central Africa revolves, and now that it is generally known that the Arabic name 'Emin' is only a cognomen chosen by a German *in partibus infidelium*, curiosity is aroused, and people are making all kinds of speculations as to his birthplace. We therefore consider it our duty to give a few facts concerning his early life which have been supplied to us by his nearest relations.

"Eduard Schnitzer was born on the 28th of March 1840 in Oppeln, in the Prussian province of Silesia. He is the son of the late Ludwig Schnitzer and his wife Pauline, both Protestants. His father was a merchant. The family removed in 1842 from Oppeln to Neisse, where the mother and a sister of our friend still reside. After being educated in the *Gymnasium* of Neisse, Eduard Schnitzer commenced the study of medicine in 1858 at the Breslau University. He completed his medical education in Berlin, where he attended the University during 1863 and 1864, and graduated.

"A strong desire to travel and a great love for Natural History, which distinguished him as a boy, led the young medical man to look for a sphere of work in a foreign land. He left Berlin at the end of 1864, and went to seek a practice in Turkey. Chance led him to Antivari and Scutari, where he obtained the confidence of the Vali Mushir Divitji Ismail Hakki Pasha, from whom he received a post on his staff, and whom he accompanied on his official journeys throughout the various provinces of the extensive district under his jurisdiction. In this way Schnitzer became acquainted with Armenia, Syria, and Arabia, and at length arrived in Constantinople, where Hakki Pasha died in 1873.

"In 1875 Dr. E. Schnitzer paid a visit to his family in Neisse, and remained there for a few months, devoting his leisure hours to the study of Natural History. Suddenly, however, the desire for travel came over him again; he went by the nearest route to Egypt, and, in 1876, we find this enterprising man entering the Egyptian service as Dr. Emin Effendi. He was ordered to join the Governor-General of the Sudān at Khartúm, and from there was sent to act as chief medical officer in the Equatorial Province of Egypt, of which Gordon Pasha was then Governor.

"Gordon was the very one to value a man like Emin, and to use to the full his gifts and powers. He sent him on tours of inspection through the districts which had been annexed

to Egypt, and employed him upon several diplomatic missions. In March 1878, after Gordon Pasha had been appointed Governor-General of the whole Sudān, Dr. Emin Effendi received from him the appointment of Governor of the Equatorial Province, which post he has occupied up to the present time."

I must quote one more passage from the German Introduction, as it refers to Dr. E. Schnitzer's reason for adopting a Turkish name, which proceeding appears to have greatly exercised many people's minds:—

"From the very first this determined man threw himself heart and soul into his work, and as he sought a sphere of labour amongst people of foreign customs and modes of thought, he was perfectly willing to give up every external indication which might stand in the way of his obtaining an unhampered entrance into the Mohammedan world. Far away from large cities where, under the guise of fashion, European habits are continually undermining the ancient and crumbling customs of Islam, and at the same time covering them with a thick varnish, there obtains a certain distrust of a solitary European, which prevents the intimate relation that should characterise the intercourse of a doctor with suffering mankind. The German humanitarian believed it only possible to fulfil his office satisfactorily by permitting no external evidence of his Frankish origin to appear. The name he chose for this purpose was Emin, 'the faithful one,' and certainly no one has ever proved himself more worthy of bearing such a name as the description of his character. It would no doubt have been impossible for him to have done so much had he retained his German name. An extraordinary gift for the acquisition of foreign languages lightened his task, for, besides German, French, English, and Italian, he mastered several Slavonic languages, as well as Turkish and Arabic. He also commenced to learn Persian, and who knows in how many Central African dialects he may not be now at home?

"How quickly and thoroughly he was able to adapt himself to a foreign mode of life, may be seen from a letter which the Doctor wrote from Trebizond in January 1871 to his sister, an extract of which has been sent to us by Lieutenant George Schweitzer, his cousin:—'Here in Trebizond, too, my good fortune has not forsaken me, and I have quickly gained a reputation as a doctor. This is due to the fact that I know Turkish and Arabic as few Europeans know them, and that I have so completely adopted the habits and customs of the people that no one believes that an honest German is disguised behind the Turkish name. Don't be afraid; I have only adopted the name, I have not become a Turk.'

"On no account must any one imagine that our countryman is a renegade, or that he has given up the faith of his fathers. Emin does not belong to those half-hearted Christians who talk about the advantages of the Mohammedan religion as a civilising agent in Africa. On the contrary, it may be seen from many of his letters that he has the heartiest sympathy with the efforts of Christian missionaries.* A crushing fact for the future of Islam in Central Africa is mentioned by him on page 414, where he says that, after more than twenty years' dominion, they can hardly point to ten proselytes."

In order to form, to some extent at least, a just estimate of what Emin Pasha has accomplished during the past few years, it is very necessary to consider briefly his work as a Governor.

When Gordon Pasha left the Equatorial Province of Egypt to become, a few months later, the Governor-General of the whole Sudān, he left it well organised and peaceful. Its financial position was not so satisfactory, for the province laboured under an excessive debt, caused in part by the initial expenses of its occupation, and also by sums not

* Emin Pasha was very anxious for the Church Missionary Society to establish mission stations in his province, and offered to support a missionary party there for three years at his own expense. In 1878–79 he rendered considerable assistance to an expedition sent by the C. M. S., *viâ* the Nile, to Ugánda.

justly belonging to it having been debited to it by various Governors of the Sudān, sometimes with the object of freeing their special province from inconvenient debts, and sometimes in order to cook their own accounts, which were not always in a flourishing condition.

After Gordon Pasha left for the wider sphere of work, his place was at first filled by Colonels Prout and Mason, who, however, only held office for a few months, as they both had to retire on account of ill health. Then followed a succession of incompetent native Governors, under whose abominable rule the province rapidly deteriorated to a pitiable condition. Oppression, injustice, brutality, and downright robbery grew like the Upas tree, and it was under these conditions that Emin Effendi was entrusted by Gordon Pasha with the reins of office.

Up to this time, Emin had been the surgeon-in-chief of the Equatorial Province; he had often travelled throughout its length and breadth in company with his chief, Gordon Pasha, from whom he had learnt much, and whose work he so much admired, as is clearly indicated in this book.* During this time he became intimately acquainted with native character, and was entrusted by Gordon Pasha with three very difficult diplomatic missions—two visits to Ugánda and one to Unyóro. This, however, was all the experience he had had when placed in power, and at first his difficulties were greatly increased by want of a definite rank, for, although

* Gordon Pasha's opinion of Emin may be gathered from his appointment of him to such a responsible post as Governor of the Equatorial Province, and I can bear testimony to the fact that he held him in high esteem. After my return from the Sudān, I had several conversations with Gordon Pasha about Emin, and he invariably expressed his high appreciation of his services as a Governor, and of his varied accomplishments. He remained in correspondence with Emin until communications with the Equatorial Province broke down, and during his residence in Palestine he wrote more than once inviting Emin to pay him a visit. These invitations were very welcome, and in a letter I received from Emin he expressed his great satisfaction that his former chief was still so much interested in his work, and continued to entertain for him a deep personal regard.

appointed Governor, no rank had been given to him on account of the intrigues of some Khartúm officials.

The state of his province in 1878, when he accepted the post of Governor, is difficult to describe in a few words. The population consisted of numerous and varied tribes, who, having once experienced the beneficent rule of Gordon Pasha, had suffered greatly from the oppression and cruelty of his successors, and there was also a scattered population throughout the country, consisting of former slave-dealers and many of their late employés, who were settled in small fortified villages over the land, and who had recommenced their nefarious practices. The officials, too, for the most part, were disreputable men; the greater number of them were criminals, who had been banished from Egypt, and after undergoing their sentences, had been taken on into Government employ. The Egyptian soldiers were very unreliable, and their acts of oppression were resented by the natives, and tended to bring about continual friction between the Administration and the mass of the population. Added to all this, many of the stations themselves required rebuilding, and a block in the Nile prevented all supplies being sent to the Equatorial Province for the first two years of Emin's rule. It is not to be wondered at, therefore, that the cares of government rested heavily upon him. Constant journeys had to be made, daily complaints arrived from all sides of difficulties between officials and native chiefs, and a continual round of stated duties filled up his time from sunrise to sunset. Many a man would have shrunk from undertaking the responsibility of inducing order out of such chaos. Not so Emin Effendi. Slowly but firmly, and with ever-increasing success, he became master of the situation, and when I passed through his province for the second time, in 1879, a most wonderful change had taken place. Stations had been rebuilt, discontent was changed into loyal obedience, corruption had been put down, taxation was equalised, and he had already begun the task of clearing his province from the slave-dealers who infested

it. This was a difficult and dangerous undertaking, for they had rooted themselves very firmly in the soil, and most of the officials in Emin's employ were in full sympathy with them. Emin was entirely alone; no friend or helper was near. Indeed, with the exception of a few months when Lupton Bey was his second in command, he has been alone from the day of his appointment in March 1878 until the present time. When at Ladó, he had also other duties to perform; the chief hospital of the province was there, and every morning he might be seen at 6 A.M. going round its wards or engaged in prescribing for the numerous patients.

By the end of 1882, Emin Bey (for he received that title at the end of 1879) had the satisfaction of being able to report that not only was his province in a state of peace and contentment, but that he had entirely banished the slave-dealers from his borders. He had also got rid of nearly all the Egyptian soldiers, replacing them by natives whom he had trained to arms.* He had added large districts to his province, not by the use of the sword, but by personal negotiation with native chiefs. To all this must be added the cultivation of cotton, of indigo, of coffee and rice, the establishment of a regular weekly post through his dominions, the rebuilding of nearly all his stations, the construction of better and more permanent roads, the introduction of camels, and the transport of goods by oxen; and last, but not least, he was able in that year to show a net profit of £8000, whereas on his taking up the reins of government, there was a deficit of £32,000 per annum. The commercial value of the province may be estimated by this successful state of affairs, which was brought about notwithstanding the fact that during the six years, 1878–84, only nine steamers

* Although not a soldier by profession, Emin was obliged to act as Commander-in-Chief as well as civil Governor of the Equatorial Province. Referring to this, he remarks in one of his letters:—"What will they expect next from an M.D.? I have been made a Governor, and now I am expected to try and qualify as a 'General in strategy'!"

had been sent from Khartúm to Ladó, and only six of these had carried supplies.

From the 8th of October 1878, the day on which I first met Emin Pasha, up to the present time, my admiration and respect for him have steadily increased. It is impossible to become thoroughly acquainted with any one in a very short time, but perhaps the best chance of getting to know a man's character quickly is afforded by a meeting such as I experienced with Emin Pasha in the heart of Africa, and shut off completely from the civilised world. Under such circumstances, if they possess any points in common, men are rapidly drawn together; and there is certainly a wonderful keenness of enjoyment in such intercourse, contrasting as it does so completely with the isolation, often experienced for months or years together, by men whose work lies in such remote regions as that which Emin Pasha has made his home.

Perhaps the thing that struck me most about Dr. Emin during my stay with him was the genuine interest he took in scientific work. Readers of this volume will not have turned over very many pages before they discover that he thought no amount of trouble too much, in order to find some new plant, or make a fresh discovery about the growth of a tree or the habits of an animal. Marvellous minuteness and accuracy characterise all his work, and are shown not least in his letters, which are written in elegant language, with exquisite neatness, and in an almost microscopic hand. He is a born naturalist, and a scientific spirit seems to pervade all his doings.

He never allowed his favourite studies interfere in any way with his official duties, and was often obliged to forego the pleasure of completing an observation or investigating some interesting fact, because of the imperative calls of duty.

It is this high sense of duty which has prevented his solving many riddles in African geography. It may have been thought that, with all his undoubted opportunities, he would

have been anxious to set at rest the surmises on many moot points, but to have done so his duties would have had to be fulfilled in a half-hearted manner; and so, forgetful of self, and not seeking the applause of the world, he has been content to go quietly on his way, performing his official work conscientiously and well, only devoting to scientific pursuits the hours of darkness and the necessary delays which occurred during his frequent official journeys. For this I think he deserves the greater honour, in that, in spite of such difficulties, he has achieved an amount of work which would have been a credit to a man unhampered by official cares.

Another striking trait of his character which called forth my admiration was his unselfishness. His whole heart seemed to be centred in the welfare of his people and the advancement of science, and no idea of fame appeared to enter his mind. His interest, too, in the work being done by others seemed to be quite as keen as that he took in his own. This characteristic is shown in his letters, by many references to Dr. W. Junker, of whom he speaks with great admiration, and in whose intrepid labours and valuable work he took a deep interest.

It will be seen from these remarks, that Emin possesses some of those high qualities which ennoble any life, and which have enabled him to live his life and do his work alone and unobserved, with a wonderful steadiness of purpose and with remarkable success.

Emin was ever ready to give advice when asked, although he never obtruded his superior knowledge, and the modesty with which he gave his opinions possessed in itself a charm. I often consulted him with regard to the treatment of disease in Africa, and in this connexion he gave me many a valuable clinical lecture; but his suggestions were always made with the greatest regard for my feelings, and without any attempt to overpower me with the extent of his knowledge and experience.

I may here, I think, quote an extract from a letter which bears upon the subject of medical practice and shows the spirit in which Emin carries on his work as a physician:—"Well I remember the day when I received the magic title of Doctor of Medicine, and thought that then the whole world was my own. May far happier days and greater successes be granted you than have been granted me! But may I give you a word of warning? Keep yourself well in hand, and do not follow without very just cause the too modern developments of medicine. A sick man is no subject, but a feeling and suffering being, whose sensibility is greatly heightened. Be to your patients in the first place friend—then doctor. Our mission is a high and holy one, and the murmured thanks of a poor man is of far higher value than a few guineas, and the knowledge that one has saved a sick child for its mother is a far more beautiful reward than can ever follow a brilliant but risky operation or the humbug of the so-called 'scientific medicine.' Do not laugh at my words. I have grown old and grey in the battle of life, but it is just this Idealism which has helped me over many a bitter hour. My strife and work draw near to their close."

It must be remembered, in this connexion, that it is now many years since Emin visited Europe, and that he has, therefore, not been able to keep abreast with all the advances which medicine has undoubtedly made. This is not his own fault. In almost every letter he asks for medical journals, as well as for information on new methods of treatment, and he has always shown great appreciation of the few papers he received from me. Unfortunately, the means of communication with him is so uncertain that many of the books I sent have never reached him.

I remember, too, with gratitude, the pains he took to teach me how to construct a map and how to make many an observation, which subsequently proved of great value to me. After returning from Ugánda, he plotted out with me my first attempt

at laying down a route, and his pleasure was very great when he found that I had so profited by his instruction that the route I had constructed coincided very accurately with his own.

The letters and papers which are to be found in this volume are running notes of Emin's work, written for the information of personal and scientific friends. In nearly all cases personal matters have been omitted. The notes were written under great difficulties when on the march, and they reflect the passing thoughts and conjectures of the man's mind. A certain amount of repetition will of necessity be found in the earlier letters. It might, perhaps, have been better to omit parts of them, but to have done so the German text must have been ignored and connecting sentences introduced. It has therefore been thought best to keep closely to the German original, the more so, perhaps, as the frequent repetition of marches through impenetrable grass, banana groves, thorny jungles, and swamps, will prove to the reader far better than any words of mine can do, the dogged perseverance of the man, who, notwithstanding the immense physical fatigue from which he was constantly suffering upon these expeditions, plodded on, note-book in hand, never permitting a noteworthy fact to escape his eye or a detail of scientific interest to go unremarked. The descriptions, too, of the details of these journeys give an accurate idea of the topography of the country, and will prove of value not only to future travellers, but, I hope, to traders, missionaries, and others who will take part in the opening up of the country. When reading over the proofs of this volume, I have been repeatedly struck with the vivid picture given of paths over which I have myself had occasion to tread. I am able to recall the very trees, the huts, and even the swampy places which Emin so faithfully portrays, and can almost feel again the sting of the numerous insects which he describes as specially haunting particular spots.

While I do not expect the readers of these letters to be

quite so vividly affected as I am, I shall be surprised if they do not gain a better knowledge of Central Africa from their perusal, than they would by reading many of the histories of travel elaborately got up for the press. The descriptions, too, which Emin Pasha gives of the people and their habits and customs, are life-like and extremely accurate, and coming, as they do, from one who has lived in the country so long, they are far more valuable than accounts written by travellers, whose knowledge of the various languages is necessarily very slight, and who are liable to make many mistakes owing to the intervention of an interpreter. Moreover, it is almost impossible for an ordinary traveller rapidly passing through a district, to become intimately acquainted with the inner life of the people with whom he only sojourns for a few days.

In order that the reader may follow Emin Pasha's wanderings with ease, I append as a note a summary of his exploratory expeditions, which Mr. Ravenstein of London has had the kindness to draw up for me, and a reference to Mr. Ravenstein's admirable map will greatly facilitate an intelligent appreciation both of the extent of the Equatorial Province and of Emin Pasha's numerous journeys.*

* *Summary of Emin Pasha's Exploratory Expeditions*, 1876–87:—

With Gordon Pasha up the Nile and to Mrūli. First mission to Ugánda, with Nūr Aga (Mrūli to Rubāga and back), June to September 1876. With Gordon Pasha to Nyamuyonga and back, September 11–18, 1876. Mrūli to Masindi, Magungo, Lake Albert (Kibiro), and down the Nile to Khartúm (arrived November 1876).

Ladó, up the Nile to Magungo, and *viâ* Kiróto and Masíndi to Mrūli, July to August 17, 1877.

Mission to King Kabréga of Unyóro, September 13 to October 30, 1877.

Second mission to Ugánda, November 29, 1877, to April 8, 1878.

Mrūli to Magúngo, April 13–28, and back to Ladó.

To Shambe and the lower Bahr-el-Jebel, June and July 1878.

Second visit to the lower Bahr-el-Jebel, and examination of the obstructions in the river, November 21–25, 1878.

Dufilé to Faloro and Fatiko and back, December 27, 1878, to January 8, 1879.

Visit to Lake Albert, March 1879.

To the western shore of Lake Albert (Lúr) and back to Dufilé and Ladó, October to December 1879.

With regard to the orthography of native names and places, Mr. Ravenstein has made it agree throughout the whole book, and the method of spelling recommended by the Royal Geographical Society has been followed. He has also provided a glossary in conjunction with the index, which not only gives the meaning of many native expressions, but the latitude and longitude of the places mentioned. This adds greatly to the value of the book to future travellers and explorers.

Dr. Gustav Hartlaub of Bremen has appended a note to the German edition, giving his opinion of the services which Emin has rendered to zoology. I quote a few passages from it. He says:—"The amount of work which Emin Pasha has performed in making zoological collections, observations, and notes, is astonishing in the highest degree. It could only have been performed by a man whose heart was aglow with the pure fire of scientific instinct, with enthusiastic, absolutely unselfish love of Nature, and with an irresistible impulse to add to the knowledge of her treasures to the full extent of his powers. Emin was able to turn this impulse into action, notwithstanding the pressure of difficult surrounding circumstances, and the many and varied duties which his high position compelled him to fulfil.

"The thousands of splendidly prepared skins, chiefly his own work, which Emin Pasha has either sent to Europe or

Ladó to Makraká-Sugaire and back, August 1880. Ladó to Laboré, Fadibék, Fatiko, Fauvera, and Panyatoli (Anfina's), and back to Fatiko and Wádelai, September 25 to November 28, 1880.

Gondokóro to Latúka, Agaru, Fadibék, Fajúlli, Obbo, and Laboré, March 31 to May 26, 1881.

Ladó to the *mudirië* of Rōl (Rumbēk) and Gōk-el-Hassan, and back, September 15 to December 15, 1881.

To Khartúm, March to June 1882.

Beden to Janda, Kabayendi, Ombamba, Gosa, Manda, Makraká-Sugaire, Wandi, and Ladó, October 9 to December 5, 1882.

Ladó to the Monbuttu country and back, May 7 to October 15, 1883.

Ladó to Wádelai (arrived July 10, 1885).

Navigation of Lake Albert and first exploration of the Dueru River, August to October 1886.

Second exploration of the Dueru, February or March 1887.

Visit to King Kabréga at Mpara, May 1887.—E. G. R.

has at the present time stored in Ladó or Wádelai, prove how well he understands the art of collecting. His work in the districts he has explored in the eastern part of Equatorial Africa, has been that of a pioneer in zoological, and especially in ornithological, subjects. The zoological work he has accomplished in central Monbuttu—and it was very great, considering his short stay there—is completely new, and judging from the hints given in his letters, we may expect a rich harvest of discoveries. A journal which Emin Pasha has sent me, but which he has forbidden me to publish at present, contains an immense quantity of interesting information as to the habits of the animals he has caught, with especial reference, however, to birds."

Notwithstanding all the service which Emin Pasha has rendered to zoology, to which alone Dr. Hartlaub has referred, it must be borne in mind that botany too has benefited to a very large extent by his painstaking researches—to what extent will only be known when the large collection of plants which he has made reaches Europe. It can easily be seen, however, from his letters, what a deep interest he takes in botany, and the experimental cultivations which he has carried on are of immense value in proving, not only the fertility of the country, but also the possibility of cultivating various commercial plants in districts where their growth had been doubtful.

To general readers, one or two chapters in this book may not be quite clear. I refer especially to Parts v. 2 and vii. 1, in which Emin deals with the slave-trade and the misery caused by the settlement of Danagla in various districts. I call especial attention to this, because I have stated in several publications that he had completely banished slave-dealing from his province; and so he had; but on the recall of Gessi Pasha in 1882, Lupton Bey was made Governor of the Bahr-el-Ghazal province, and the provinces of Rōl, Makraká, and Monbuttu, which had been previously governed by Mula Effendí, were transferred to Emin's jurisdiction.

This accounts for his new difficulties, and these letters were written whilst he was engaged in the arduous task of freeing these new districts from the active slave-traffic that was going on. He was completely successful, and it was only after the Mahdi's rebellion that he was compelled to withdraw his troops from these outlying districts, where the slave-trade then recommenced.

Speaking of the Mahdi's rebellion, a very concise and interesting account of its commencement and progress is given by Emin Pasha in Part vii. 6 (p. 432), and the later letters also refer to it, in its effects upon the Equatorial Province.

Emin's dealings with the natives are worthy of notice. He has always been patient in the extreme with them; he has a high opinion both of their intelligence and their capabilities; he respects their peculiarities, their modes of thought, and their beliefs, and the influence which he is able to exert upon native chiefs is very remarkable. His dealings with Mtésa and Kabréga were characterised, not only by a keen sense of justice, but also by a thorough appreciation of their various needs. Mtésa had the highest respect for him, and on several occasions he expressed to me his appreciation of the way in which Emin had preserved his independence, when it was threatened by the injudicious action of Nur Bey, who had marched to his (Mtésa's) capital with three hundred Egyptian soldiers with the intention of annexing Ugánda to Egypt. This action of Nur Bey's, by the way, was in direct opposition to Gordon Pasha's orders. Emin's power over the natives may also be gathered from the fact that he entered into friendly relationships with so many of the petty native chiefs whose districts adjoined his province. One after another began to trade with him, and sooner or later, with very rare exceptions, they asked him to extend Egyptian authority over their lands, and without a shot being fired they became tributary chiefs. They recognised that it was to their advantage to do so, for, once having placed themselves under his beneficent rule, they

knew well that their district was safe, both from the slave-trade and from the raids which the Egyptian troops so frequently made into the outlying districts.

I must touch upon one other point. Emin Pasha refers in many places to the trouble he suffered from limited authority. Baker and Gordon were absolutely independent of any central authority at Khartúm; they had the power of life and death, and were responsible to the Khedive alone for their actions. Not so Emin. He was obliged to report almost every detail of administration for the approval of the Governor-General of the Sudān, and when one considers that months, sometimes years, elapsed before he received an answer to his communications, it will be readily understood how greatly his hands were tied, and how difficult it was for him both to maintain order and to introduce improvements into his province. With regard to the commercial administration of the province, it was the old story over again—the Egyptian Government requiring the bricks to be made and refusing to provide the straw. Emin could not obtain supplies from Khartúm, and even the seeds which he required for cultivation experiments had either to be purchased with his own money or to be begged from his numerous friends. What wonder that the Equatorial Province did not prove a gold-mine! The wonder is that, left to his own resources, he was able in so few short years to transform the finances of the country, and, instead of holding his province at a yearly deficit at some £32,000, to make a nett profit of from eight to twelve thousand pounds per annum, as he did from 1882 to 1884.

The difficulties and dangers which disturbed the Equatorial Province in consequence of the evacuation of the Sudān are described in Emin's letters. He was himself unaware of the events which were taking place north of his territory, but it was only too evident that the prosperity of his province was threatened, and he had a desperate struggle for its very existence. At length the Mahdi's hordes began to retire, and

Emin was subsequently able to recover most of the ground he had lost. In October 1886 temporary aid arrived in the shape of a caravan from Ugánda with supplies from Dr. Junker. Emin speaks of the almost childish joy with which he and his people welcomed this caravan. In April 1887 he heard that help was probably coming from England, and in a letter written to me then he says:—"You can imagine better than I can tell you that the heartfelt sympathy which has been expressed for me and my people in England . . . have richly repaid me for many of the sorrows and hardships I have undergone." The news has not yet reached us of the arrival of the expedition, which Mr. Stanley has led with his usual undaunted courage and perseverance, but it is to be hoped that long ere this he has clasped hands with Emin and given him the help and encouragement which he so well deserves.

It will be noticed how firmly Emin states his intention of remaining at his post until the future of the country he has ruled so long and of the people in whom he takes so much interest be settled. He says:—"The work that Gordon paid for with his blood, I will strive to carry on, if not with his energy and genius, still according to his intentions and with his spirit;" and, again, his concluding words are:—"All we would ask England to do is to bring about a better understanding with Ugánda, and to provide us with a free and safe way to the coast. This is all we want. Evacuate our territory? Certainly not!" I feel sure that those who read this book will honour him for his decision, and will understand the need of keeping up a judicious and firm rule in the country which he has saved from slavery and barbarism. If it is developed in such a way that the good of the people be secured, it will form a centre of civilisation and liberty to the whole of Central Africa.

In order that Emin may continue his work, it will be necessary for a trade route to be opened up between the east coast and the Equatorial Province. It is not my intention

to give here my opinions about the future of the province, or the way in which I think that the Central African Question should be solved; but there is no doubt at all that if wise measures are set on foot, Emin's desire for a "safe road to the coast" may soon be realised, and a way opened up from the Equatorial Province to some port, either Mombasa, or, as Mr. Ravenstein has suggested, to Kismayu. Supposing for a moment that the latter port were chosen, the transport question would be greatly simplified. It will be noticed in one of Emin's letters (see p. 390) that he had already introduced camels into his province from Turkan, and there is every reason to suppose that the whole of the country between Lirēm, one of Emin Pasha's stations, and Kismayu, might be traversed by camel-caravans at a rate of some twenty-five or thirty miles a day. The distance as the crow flies from one point to the other is about 650 miles, no great distance surely; and as the people who inhabit the lower districts, the Masai, are really akin to the Latúka and Lángo, with whom, as may be seen from Emin's letters, he has no difficulty at all in dealing, it is only reasonable to suppose that, with care and patience, a trade route could be opened up with very little expenditure of either time or money. Indeed, some such arrangement must be come to, unless it is the intention of this country to relinquish all participation in the commercial activity which is daily receiving greater impetus in Eastern Africa, to abandon to anarchy districts which would well repay any present expenditure, and to relinquish to others the fruits of the labour of many a British explorer, and of a generation of diplomatic and commercial effort on the east coast of Africa.

Two portraits of Emin Pasha are given in this volume. The one was taken in Germany in 1875, and appears in the German edition; the other (the frontispiece) is from a photograph taken by the French Consul at Khartúm in 1882, and has been specially prepared for this book.

Knowing the trials with which my friend has had to contend,

I appreciate to the full the noble, self-denying efforts he has made, and I realise the difficulties of his present condition. I therefore conclude with the wish that the readers of Emin Pasha's letters may learn to know and appreciate him as I have done, and may share my hope that he will be enabled to carry on the work, which he has for so many years, and under such great difficulties, successfully accomplished. In every sense he is Gordon's heir, and I trust to my fellow-countrymen having public spirit enough to support him in his work of civilisation, and to prevent the relapse of the Equatorial Province into the hunting-ground of the slave-dealers, or its conversion into a mere field for commercial exploitation.

ROBERT W. FELKIN.

20 ALVA STREET, EDINBURGH,
February 14, 1888.

EMIN PASHA'S LETTERS AND JOURNALS.

I.

FIRST JOURNEYS IN THE MÁDI COUNTRY, IN UNYÓRO, AND IN UGÁNDA.

1. From Ladó up the Nile to Dufilé.

(*Letter to Dr. A. Petermann, from Dufilé, July* 16, 1877.)

BEDÉN—KIRI—DEFORMITIES OF THE BARI WOMEN—WILD ELEPHANTS—LABORÉ—KHOR-ET-TIN.

As you will see from the heading of my letter, I, the ceaseless wanderer, am once again in Dufilé, and I am making use of the leisure time afforded me to send you a few lines of greeting from this distant land. After having heard from Makraka the sad news of the death of Herr Kopp, Dr. Junker's fellow-traveller, I left Ladó, and was towed by the steamer to Gondokóro, where I remained with my *dahabīye* for the night. The next morning I continued my journey, negroes towing my boat up-stream. My arrival at Rejáf was delayed until evening, for the east bank of the river presented many hindrances to my people, on account of the projecting *tawfs* (floating grass islands) and the abundant bushes and trees; and as the river was unusually low—for this year we have a *Kharīf* (rainy season) without rain—my *dahabīye* was obliged to tack continually to prevent running aground. My measurements

give for the summit of Mount Rejáf a height of about 1770 feet, which is certainly far from corresponding with Baker's 4186 feet. I am quite sure of the accuracy of my observations, as also of my calculations (this is the third ascent I have made), and cannot, therefore, account for so great a discrepancy either through a mistake in reckoning or through any carelessness on my part.

From a negro chief here who was known to me, I received several beautiful living hyraxes and an "Um Dikdik" (*Neotragus Hemprichianus*), also alive.

The journey from Rejáf to Bedén, our next station, was only a short one. It occupied four hours on foot, but five by water, on account of the numerous sandbanks and windings of the river. On both the river-banks, which consist of gently rising, undulating, sandy ground, coarse-grained gneiss, often very like coal blocks, and pieces of yellowish mica are seen here and there. Where the upper crust has been washed away by heavy rainfall, light red clay containing iron is exposed to view. A few tall tamarinds and beautiful detaria laden with golden fruit are scattered about, while at intervals a kigelia swings upon long tendrils its grotesque fruit, the pulp of which is used for dressing wounds. Nearer to Bedén the groups of rock become more numerous, the vegetation richer, and well-wooded islands (Seba Jezaïr) adorn the river, into which rocky promontories jut. Many rocks lie just beneath the surface of the water, their presence being marked by small eddies, and rendering the navigation difficult. At last, after passing through a narrow defile, where the water, obstructed by rocky barriers, rushes headlong forward, our boat reached the shore of the island of Bedén, once the headquarters of the chief of the same name mentioned by Baker. The small island, situated in the midst of raging rapids, forms a healthy residence for its little garrison, which lives on the best of terms with the surrounding negro tribes, and is of great importance in securing the safety of the transport up the river. All goods coming from the north are disembarked here, and are carried by means of a wire-rope ferry, established by the thoughtful care of Gordon Pasha, to the west bank of the river, where there is a "portage" for about a quarter of an hour to a point above

the rapids. Here the goods are again shipped for transport to Kíri.

In conversation with Sheikh Bedén, who came with six sons to greet me, I learnt further details about the existence of a race of dwarfs who are said to inhabit mountain caves to the west of Bedén. These little people, of about forty inches in height and of a brown colour, are greatly dreaded by the negroes. They are said to shoot very small arrows, which are deadly poisoned and very difficult to extract, and to live on white ants and roots, not, however, despising a sheep or a goat. On account of their great agility, they are difficult to catch; and as they live in their caves, the negroes do not trouble themselves about them, but avoid going too near the mountains. I was told that the mountain which they inhabit was named "Nyan-Nyan," and some of the people call the dwarfs by the same name, but others call them "Nyam-Nyam." Now, this name would curiously coincide with the statement made by Mariette Bey, that all dwarfs were called by the ancient Egyptians "Nam," or reduplicated, "Nam-Nam." I refrain from any comment on this point. I had heard several months before of the existence of such pigmies, who appeared to be the remainder of a dwarf population which ages ago spread itself over Central Africa, but I had considered the rumour to be a myth, for I was loth to believe that such curiosities could exist in a country which had been occupied by us for years, without any one knowing of them.

Bedén is some 1490 feet above sea-level. The island suffers from a plague of ants, which renders the cultivation of the soil almost an impossibility, and compels the frequent rebuilding of the huts. The soil is composed of coarse sand.

Early next morning, the "Nuggers" (boats) were ready to start, and we made our way up-stream; but progress was slow, owing to rocks obstructing the navigable channel. It was lucky that the boats, which were built of very tough acacia wood (*sunt*), could bear with impunity many a hard bump on these rocks, although after a sharp collision they often shipped great quantities of water, on account of their badly calked seams. European boats would fly into a thousand pieces if subjected to the rough usage customary here, apart from the fact that no

European wood could withstand the climatic influences or the ravages of the boring beetles. The amount of destruction caused by these beetles (a small brown Bostrichus species with a strongly developed thorax) is almost incredible, whole trunks of trees being transformed by them into powder in a marvellously short space of time.

The country between Bedén and Kíri does not present any remarkable features. Sandy mounds, with here and there scattered trees, rise gradually towards the south. The river-banks, however, were considerably higher than formerly, and literally covered by water-birds. Stately yabirus (*Mycteria*) and cranes, as well as Nile geese of both species, stood in pairs upon the small sandy islands and at the confluences of the streams, and we saw numbers of tantalus, ibis, vanellus, &c., and the never-failing *Hyas ægyptiacus*.

After a successful journey of six and a half hours, we arrived at Kíri, where I received an extremely warm welcome from Mason Bey, who had just returned from surveying the Albert Lake. According to the friendly account he gave me, the lake was circumnavigated and surveyed on board the steamer *Nyanza* in five days. Its southern end was found to be 1° 10′ N. lat., its most westerly shore 30° 30′ E. long. There is no outflow towards the west. Mason Bey will send you full particulars as well as a map. Gessi's river Wádelai was not found. I also sought it in vain last year.

I send you the definite latitudes of our stations, for which I have to thank Colonels Mason and Prout:—

Ladó,	5° 01′ 33″	N. lat.	Col. Mason.
„	5° 00′ 52″	„	Col. Prout.
Bedén,	4° 35′ 48″	„	Col. Mason.
Kíri,	4° 18′ 12″	„	„
Muggi,	4° 08′ 36″	„	Col. Prout.
Labóre,	3° 55′ 53″	„	Col. Mason.
Dufilé,	3° 34′ 35″	„	
Magúngo,	2° 14′ 43″	„	31° 31′ 45″ E. long.
„	2° 13′ 54″	„	Col. Prout.

As I already intimated to you, the sketch map I sent you is in need of many alterations, because the positions on it were obtained by dead reckoning. The corrections are especially

noteworthy between Ladó and Dufilé; the latter place I put down as 3° 34′ 33″; it should be 3° 34′ 35″. The difference in the position of Magúngo (according to Baker, 2° 16′ 00″ N. lat., 31° 30′ 00″ E. long.), is to be explained by the removal of the station farther to the east. In any case, a basis for a new map has now been obtained, which will probably not require much alteration.

On the evening of my arrival at Kíri, a station situated upon a hill composed of gneiss and hornblende schist, we experienced a small shock of earthquake, a slight undulating rocking, followed immediately by a noise resembling the roll of distant thunder. It took place at 6.30 P.M. The weather was perfectly clear, and the barometer remained absolutely unaffected. In a second all was over, but the same kind of shock occurred again twice during the night. According to letters received from Rejáf, the shock was also felt there, whereas in Muggi nothing was noticed. It is said at Kíri that all earthquakes—and they are very frequent, but never destructive—originate from a prominent ridge of hill, and that there a rotatory movement is felt. In very dry seasons, and especially just before the commencement of the rains, the earthquakes are most severe and frequent. I heard the same report at Rejáf, which place takes its name from "earthquake." In Ladó earthquakes do not often occur, so that Kíri and Rejáf would appear to form the vertices of an ellipse.

A stay of two days at Kíri gave me an opportunity of making observations and collections, and the mosquitoes only making their presence felt occasionally, all my surroundings favoured a comfortable rest. The people here are Bari, and belong to the same tribe which you know inhabit Ladó and Rejáf, with this difference, that instead of the cotton loincloths worn by the girls there, that article of their apparel is made of small iron chains woven together by fine iron rings. The married women in both districts wear aprons made of soft leather dyed with the juice of the fig or the gardenia, and the men are absolutely naked.

A remarkable deformity is frequently noticed in the Bari women, namely, the enormous enlargement of the *bursa patellæ* of both knees, often to the size of an orange. This is probably

caused by the fact that the women perform most of their duties kneeling, and also by their being obliged to crawl into the huts on account of the low doorways. Another thing worth mentioning is the almost invariable disproportion in the development of their breasts, one being much smaller than the other. Umbilical hernia, caused by the navel cord being torn at birth instead of tied, is frequent in both sexes; hydrocele is often seen; and *elephantiasis scroti* is met with here and there. The people try to protect themselves from syphilis, which is very prevalent, by inoculations upon the arm.

A passable road leads from Kíri to Latúka. The height of Kiri above sea-level is 1567 feet. After two days' rest there, while I awaited the arrival of a young officer who was to accompany me, we entered upon a hilly country, seamed in all directions by rocky ravines. Frequently the path is crossed by ridges of tightly packed stones, apparently radiating from accumulated heaps of rock, and looking as if they were intended to divide the country into definite parts. Here and there, in the midst of high and beautiful trees, Doléb palms are seen, the first met with since leaving Bor. The narrow river, broken by many a rock, foams and roars between the hills, which completely shut out the view of the country beyond. There can be no question of navigation here, and the route as far as Dufilé can only be traversed by land. To the east and south lie the blue mountain masses of Kelen and Kuku. The road, which has led over gneiss rubble and white sand, in which fragments of mica were seen, becomes broken shortly before Muggi is reached by many deep rain-furrows and several swamps. A short march brought us to the station of Muggi, which is situated close by roaring rapids, its height above the sea-level being about 1640 feet. Porters having to be changed here, a short sojourn was indispensable, and permitted time for making collections. A good specimen of *Rhabdogale mustelina*, which is very common here, was brought me.

Early next morning, as soon as the necessary porters had assembled, and after each had found his load—our porters, you must know, are very capricious—the formidable file was set in motion. The first part of our way led over level ground, with here and there a few boulders. Then followed

wide, moist patches covered with Cyperus grass, and intervening breaks of sward, where *Pentstemon* (?) and red Ipomaeas bloom, and reddish and white sandy patches form the favourite habitats of balanites and long-thorned mimosas. After a three hours' march we rested a while near a stream of clear, cool water. As the road nears the extensive chain of the Kuku mountains, the hills begin to rise, and gradually form a kind of barrier, behind which the well-wooded mountains, rising in two high terraces, almost vanish out of sight. From this point the footpath leads along half-way up between the hill-tops and the river, which is here narrow and foaming, and more like a mountain torrent than like the Nile as seen at either Ladó or Dufilé. It sinks down into deep gullies formed by the rain, only to rise again suddenly, and then to lead us past magnificent clusters of trees (tamarinds, *Butyrospermum*) to the station of Labóre, situated on an almost isolated hill (1700 feet) and therefore visible from a long distance. The scenery of the country just traversed reminds one by its grandeur of certain districts in the Balkans.

On the way we had heard a good deal about the elephants, which, being very numerous here, break into the stations and unroof the huts. I saw at this place a soldier who had been wounded by an elephant. The animal, which had no doubt been previously wounded, and therefore become separated from its companions, had hidden itself in the bush at a bend in the road, and lifted with its tusks the foremost of the soldiers who were returning from Dufilé into the air. When, however, the soldier thrust his arm into its mouth, it dropped him, and transfixed the upper part of his right thigh. Then, molested by shots, it relinquished its victim and retired. The wound was of no great importance, as fortunately the tusk passed between the muscles without injuring any vessel.

Labóre is strategically an important position. The same evening about two hundred porters had collected in order to place themselves at our service for the next long march of forty miles to Dufilé, and after they had abundantly supped, and danced and sung for half the night, a start was made early the next morning. The scenery along the road is magnificent, and teems with life. The blue river foams in a

thousand small cascades and rapids through the deeply hollowed bed. On the east bank the hills gradually rise to beautifully wooded mountains, one chain of which forms Jebel Arju, and follows the river to a point near Dufilé. Terraces covered with cultivated patches of green durra, sesame and lubia, and here and there a few huts upon the flanks of the hills, offer agreeable resting-places for the eye.

Upon the west bank, on which we were travelling, hills interchange with park land, with yellowish-white sand patches, and with chaotic masses of beautiful red and yellow striped porphyry. Tall, sturdy trees provide shade, and wooded islands adorn the river. The grotesque forms of *Euphorbia candelabrum* stand out upon the naked rocks, now with short trunks splitting up into a semicircular entanglement of leafless branches, then with high pillar-like trunks bearing only at the summit a few candelabra. *Solanum coagulans*, and *Calotropis procera*, with their small yellow balloon-like fruits, containing silken filaments, become more abundant from this point. Khor Ayu, now very low on account of the drought, flows down between blocks of metamorphic schists, and the small station situated upon it afforded us a temporary halting-place. It is surrounded on all sides by mountains, and was erected to guard the passage.

The river valley becomes narrower and narrower. Towards the south it seems to be shut in by the majestic Jebel Meto; along the river mighty Doléb palms (*Borassus flabelliformis*) rock their feathery tips in the soft breeze. The scattered boulders become more numerous; a group of high tamarinds marks the place where the path suddenly deviates from the river to lead over the hilly heights (rising up to 2000 feet) of the widening valley, and the way for the most part winds upon their summits. Thorny acacias, sharp-edged grasses, and rocky rubble, characterise this section of the road. Two deeply cut ravines, having a steep descent and a still steeper ascent, were passed; far and wide no drop of water was to be found! Another vigorous march through high grass, and before us ran Khor-et-Tin, a dirty stream overgrown with reeds, and polluted by elephants, but still drinkable, upon the banks of which we took up our quarters for the night. Rolling thunder and the snorting and trumpeting of numerous elephants,

who were alarmed at our fires as they came to water, served for our lullaby.

Next morning light rain did not prevent an early start. The road led up and down hill, as just described. All the *khors* were dry. Our thirst became intense, when at last a new *khor* provided us with a small quantity of good water. Along the whole of this part of the road the river is hidden. To the right is Jebel Kuku, at a distance of from one to one and a half miles from our path, and upon the east bank of the river the azure heights of Jebel Arju stretch out, running parallel with those of Jebel Kurdu. The latter, partly covered by bushes, often present bare cliffs, rendered so black by the action of sun and rain, that their real composition is unrecognisable from a distance. These cliffs frequently look like gigantic seams of coal. After a short time distant rumbling announced the proximity of the falls of Makedo and Apuddo, and hence our approach to the river. A few minutes more, and the path changed its direction to the south-east, leaving the Kuku mountains, which abruptly terminated here. A glorious panorama opened out before us. The hill gradually sloped down to level ground, which stretched out into a wide plain, dotted here and there with palms, and through its expanse the mighty river, blue and shining, flowed on in sweeping curves. Azure hills and purple-headed mountains formed the picture's frame. By a gentle descent we left the hills, red passion-flowers and lemon-coloured grass lilies bedecking the path. The roll of drums and clang of bugles bid us welcome—we were in Dufilé.*

* The geographical nomenclature of the country between the Khor Ayu and Dufilé has undergone considerable changes since Emin's visit in 1877. The Kuku are a sub-tribe of the Mádi living on the Ayu; Jebel Meto had better be called Jebel Otze; and the other mountains referred to above are likewise known by other names. The Rapids below Dufilé are known as Fola. Makedo is a district far down the river, near Kíri, whilst the Apuddo are a tribe of the Mádi, near Dufilé, in whose territory Sir S. W. Baker built Ibrahimia.—E. G. R.

2. From Dufilé up the Nile to Magúngo on the Albert Lake, and subsequently *viâ* Kiroto and Masindi to Mrūli.

(*Letter to Dr. A. Petermann, from Mrūli, August* 20, 1877.)

THE MADI—THE NILE BED—MOLA'S VILLAGE—THE MAGUNGO—LANDSCAPE PICTURES—BAKER'S MASINDI—DISTRIBUTION OF THE FLEA—IRON INDUSTRY.

My last letter will have told you that I arrived in Dufilé, and thought of staying there several days. As there is nothing specially noteworthy about the place itself, I was very glad of the spare time for collecting specimens, for making excursions into the neighbouring Mádi villages, and for compiling a small vocabulary of their language.

The Mádi do not appear to be a very numerous tribe; their district joins the Makraka country on the west, and extends towards the south along the west bank of the river to Wádelai, where the Magúngo as well as the Mádi language is spoken. South of Wádelai (also on the west bank of the river) live the Lúr, who are subject to Kabréga, and speak Magúngo. I shall have the opportunity of speaking of them later on. Madi also live on the other side of the river, to a distance of about three days' journey to the east of Dufilé; then come the Umiró, a tribe of the Lángo; then the real light-coloured Lángo (Galla), who breed asses and camels. The most southerly place occupied by the Madi on the east bank is Bora, while their south-easterly neighbours are the Shuli, who, to judge from their language, must belong to the Magúngo. The men here also are totally unclothed; the women wear a simple girdle with a tail made of bark fibre, and an apron in front, about the breadth of two fingers, made out of leather or cotton-stuff. Iron ornaments, in the form of necklaces, bracelets, and anklets, are much worn. The rings worn upon the arms and necks of very fashionable men often form regular armour, handsome to look at, but, one would think, uncomfortable to the wearer. One misses in this district the beautiful iron

beadwork (aprons, &c.) such as is so often found, especially amongst the upper Bari and the Makraka Nyam-Nyam. The blacksmiths, who are seen in almost every village, confine themselves to the manufacture of lances, arrows, and the above-named ornaments, as well as a kind of shovel (Arabic, *malat*) for cultivating the soil. These shovels form also a unit of value, by means of which porters, &c., are paid and oxen and brides are bought. The Mádi language is totally different from the Bari, and is more akin to the Makraka language. There is nothing specially noteworthy in the Mádi customs.

The day for our departure arrived, and in beautifully cool weather the little screw-steamer *Nyanza* started up-stream towards the south. At an almost regular speed of about four English miles an hour, we steamed up the broad and beautiful river, which unfortunately was full of floating vegetation. The screw of the steamer was, to begin with, small, and rotating amongst the floating grasses, it kept getting entangled with plants, so that the steamer was often compelled to stop for a time, so as to allow a man to get down and clean the screw. The west bank above Dufilé was adorned by a long row of Doléb palms, which looked very beautiful as they waved against the dark-blue hills in the background. I had not seen so great a number of these palms since leaving the Shíluk country between Fashoda and the Sobat, near the northern limit of their distribution; and I may mention here that they become more and more rare towards the Equator. In Mtésa's country I did not see a single one.

Rising from the low east bank of the river, the hills of Jéïfi are seen from a long distance; they gradually advance towards the river, into which they gently slope. Short grass and isolated tall trees adorn the otherwise bare flanks, the red colour of which is very striking. Papyrus and yellow flowering ambaj (*Herminiera*) deeply fringe both banks. On the east bank wild rocks, towering one above another, form a kind of chain, which gradually sinks, in the neighbourhood of the perennial Unyama, in order to give room to the plain which gradually slopes to the east. The west bank, on the contrary, presents a plain, evidently exposed to floods, while rather high and well-marked columnar mountains form

a long chain which, with few breaks, extends towards the lake.

The river is frequently broken by huge rocks belonging to a transverse reef, and motionless herons sit enthroned upon them. Enormous fringes of vegetation block the access to the river. Papyrus, Herminiera, and Arundo form the gigantic growth of these impassable masses; Cucurbitaceæ and Ipomæas twine themselves in festoons from plant to plant; Vossia composes the underwood; and Pistia, Potamogeton, Vallisneria, Ottelia, and other small aquatic plants form a thick turf on the edges. Numberless swarms of small Fringillidæ, golden black-browed weavers, find here retreats where they are never disturbed. In shady spots stands the *Scopus umbretta*, in deep meditation, with its bill resting on its breast. A panting hippopotamus plunges into the blue spray-crowned waves, leaving its shady resting-place at the noise of the steamer. Blue-green snakes cross the water with uplifted heads, and the pretty *Parra africana* hastens over the broad leaves of the water-lily, picking up a few snails by the way. After a violent thunderstorm had added still further variety to the scene, we anchored, late in the evening, to the high and easily accessible clayey bank at Bora.

No sooner was the steam-whistle sounded than the tall grass started into life. Negroes made their appearance from all sides, with pieces of firewood in their hands, to barter with the captain for a few beads. During this business, which took place amidst joking and laughter, I paid a visit to the little village of Bora, situated at the foot of the hill at ten minutes' distance from the bank of the river. The way led through fairly tall grass past Doléb palms and tamarinds. Mola, the chief of the Mádi who inhabit the village—this being their most southerly limit—received me in a friendly way, and offered for barter eggs, fowls, and fruit of the Doléb palm. The village is small, and consists of rather miserable, hemispherical, straw huts, and numerous granaries standing on three legs and resembling the *gugas* of the Bari. They contain eleusine corn of light yellowish colour, evidently a variety of a corn that I have only seen reddish brown before. There are banana plantations, but unfortunately no fruit; and sesame is largely cultivated. All

the men I saw were naked, except a young man who wore a small apron of cotton thread. Iron ornaments seem to be very much esteemed; many of the people have their lips pierced, as well as the rims of their ears, in which short pieces of straw are stuck. I saw bracelets of ivory and of hippopotamus and python skin, and girdles made of the thin scales of a land shell. There were no women visible. The principal chief is named Lonya, and lives a little farther up the stream; unfortunately, he did not make his appearance until our boat had already started, and though he called to us, we could not manage to turn back. Meantime the trade in wood had come to an end, and an abundant supply of firewood was laid in. We now continued our journey through huge masses of floating plants. Both banks are shut in by chains of hills. Above Bora numerous *tawfs* combine with banks of mud to form a kind of barrier, through which the steamer slowly made its way from one channel to another. I may remark that, on the whole, the river is not very deep in comparison with its considerable breadth. Where the papyrus growth permits a view of the shore you frequently see steep banks of red clay, usually dotted with houses and bananas.

To-day again a regular tropical thunderstorm broke over us. We are in the month of July, but in the middle of the *Kharīf*, and as the rain lasted a long time, we anchored in the river two hours after sunset. An awning was put up, and the whole company of crew and passengers retired shivering under their ox-skins and coverings. The rain continued until eleven in the evening. About an hour and a half before sunset we had passed the spot where on Gessi's map are written the words, "Branch to the west." I have recently been able to convince myself that the stream which was supposed to be there does not exist; but there is a branch to the west, which joins the river again after flowing round an island.

The journey was resumed at 3.10 A.M. before break of day, although we were all shivering. The sunrise presented us with a magnificent spectacle. The broad majestic stream, now freed from all vegetation and obstructions, was gilded by the rising sun, and we could see the tall red cliffs, the wooded hills ascending gradually to the lofty azure mountains,

scattered huts and villages peeping out of euphorbias and acacias, and here and there an ant-hill, on the summit of which stood out the sharp outline of an antelope; tall Doleb palms too were visible, many with red, purse-shaped nests, like large fruits, constructed by the weaver birds; and in the distance before us rose the lofty summits that skirt the western coast of the Albert Lake. In all parts of the river were baskets and weirs, often of great size, indicating an abundance of fish. Large and small fishing-boats, made out of hollowed trunks, crossed the stream in every direction. Their inmates, generally one, but sometimes two and three persons, were very black in colour, and handled their single paddle with great dexterity.

The euphorbias were very striking in the woods along the bank, not the beautiful column-like euphorbia of which we find isolated specimens in the south, at the foot of, and often upon, the rocks—that only seems to grow on elevated points of land—but the variety which from its entanglement of leafless branches (*Salva venia*) looks like a broom turned upside down.

Whilst on the western bank the high mountain chain trends away, the eastern bank had gradually sunk, and formed a stretch of low land, rising towards the east, covered by dried-up yellow grass and many bushes. Numerous large herds of antelopes, their red-brown skin blazing in the sunlight, grazed near the river; a troop of about thirty elephants moved slowly along the bank, and snarling, frightened monkeys took to flight as the steamer approached the bank. At last the eastern bank ran into a bare, broad spit of land; the hills on the west bank retreated still farther towards the south-west; the already broad stream became broader; the spit of land was past; we were in the lake!

Rolling mist, through which only the mountain-tops rose into view, shut in the horizon from all sides, thus leaving the imagination free play. Across the beautiful free expanse of water the steamer turned toward the east, so as to reach the mouth of the Somerset Nile; and the nearer we got to the land, the thicker became the floating vegetation, as also the *tawfs* and banks of mud, overgrown by large-leaved water-lilies, and forming the haunt of hundreds of aquatic birds. *Plotus melanogaster* is

also very abundant here. Our brave steamer forced its way through the plant barriers and sandbanks. Large numbers of fishing-boats, some of which would hold five or six persons, paddled about among the islands. An immense number of contrivances for catching fish covered both banks of the slowly flowing but broad and deep river. On either bank, beautiful woods, in which Dolèb palms were occasionally seen, alternated with open places which permitted a good view of hilly country. For about five miles we proceeded up-stream, keeping always to the northern bank of the river, where the current is stronger and the water deeper, until at last we reached the station of Magúngo, situated on the south bank of the river, from which place we were destined to commence our land journey.

The necessary stay here to procure porters was most welcome to me. My ethnological collection grew visibly, and I was able to obtain much information about the Lúr or Lúri. The country belonging to this tribe lies, as I have already indicated, between Wádelai and the mountains which skirt the western coast of the Albert Lake, including the mountains, and stretching far towards the west and south-west. Fine woods cover the country, in which are found in abundance most of the animals that exist in other parts of Central Africa (I procured skins of the *Colobus Guereza*). There is said to be a considerable river a few days' journey distant towards the west or north-west. All the utensils, ornaments, and arms betoken proximity to the Nyam-Nyam. But I obtained also many cinctures ornamented with cowrie shells (*Cypræa moneta*), which I suppose were imported from here. Lúr, indeed, is subject to Kabréga, and intercourse between here and there is very frequent owing to the facility of navigation. When I made inquiries—I use the Wagánda language, which I learnt in the beginning of the year, and which many of the people understand—about the origin of the cowrie shells, which are so abundant, and so much prized in Unyóro and Ugánda (4500 cowries = an ox at Kabréga's), I was assured most positively by the natives that all such shells in Unyóro came into the country from Ugánda, and that they were brought there by people from the south. It is certain that people have never come to the Albert Lake from the south for purposes of trade. Every

trade in Unyóro depends, and has always depended, on Ugánda, and this is the only explanation of the fact that neither Kamrási nor his son Kabréga thought of retaliating for raids made by the Wagánda upon their country.

The people of Magúngo are of a black colour, through which, however, appears very distinctly a red ground-tone. The men and women are on an average a little under middle height, and generally without any muscular development; they are all clothed in skins, which have been well beaten to render them soft, or in yellow bark-cloth. A round patch of hair crowns the otherwise smoothly shaven head, which is always uncovered. No tattooing is practised, neither are the ears or lips pierced. All, without exception, draw the lower incisors, many also the lower canines, but they could not give me any reason for this custom. The teeth are drawn when puberty is reached. As ornaments, they wear iron necklaces, bracelets, and rings of iron and copper, of various dimensions; special value is set upon copper. All Magúngo are passionate fishers and hunters; their arms consist of spears, wickerwork shields, bows, and strong, smooth, unbarbed reed arrows, covered with a poisonous paste, and iron-headed. The fishing appliances are very well described by Baker, as are also the nets for trapping game. Amulets of all kinds are greatly prized; every man carries pieces of roots, curiously formed bulbs, and segments of goat's horn filled with small roots and made into a necklace. In order to unveil the future or determine questions of difficulty, fowls are killed and their entrails examined by the *Maganga* (magician). No chief will return by the way he has come. The time of new moon is fraught with magic power, in consequence of which the common people celebrate its appearance with music and clamour, the chiefs with hecatombs of fowls. If any one wishes to marry, he purchases his wife from her father. Four oxen for beautiful girls and three oxen for less lovely ones is the conventional price. A sheep is given into the bargain, and is usually eaten at once. If the wife bears a child, two oxen are presented to her father, who may kill them. If she has no children, and is therefore sent back by her husband, she is entitled to two oxen, and two are returned to her husband. The wedding is celebrated with dancing and

mrissa-drinking, but is accompanied by no ceremonies. Fecundity increases a woman's prestige, and sterility attaches a stigma to her. Polygamy is universal. At the birth of a child no ceremonies are observed except the naming of it by the father; but if twins are born, and especially if they are of the same sex, the whole village unites in celebrating the happy event. Besides the word for twins, the language contains two special words for the first and second born of them.

The Magúngo are very clean and particular in eating and drinking. Corn is very little cultivated in the country, and what little there is (sorghum and eleusine) is used chiefly in the preparation of *mrissa*. The principal food consists of sweet potatoes (*Batatas edulis*) and bananas, which are very abundant. Sesame and groundnuts, and more rarely voandzeia, are cultivated, and, together with several varieties of wild hibiscus, provide oil and vegetables. Meat is little eaten, the flesh of elephants and hippopotami never, for it causes eruptions on the skin, as also does crocodile flesh. The people are very fond of all kinds of game and fish; they hardly ever eat fowls, and still more rarely eggs.

When any one dies, a shallow trench is dug near to the hut of the deceased, and the body, placed on its right side, and fully clothed, is laid in it, and then it is filled up. Wailing is the only outward sign of grief. No utensils, &c., are put into the grave. The sons and the wives of the father divide the inheritance between them. I saw a most interesting case of puerperal mania in a domesticated negress in the station of Magúngo. It was to me a unique experience.

In the districts of Unyóro with which I have become acquainted (Shibíro, Magúngo, Masíndi, Londú, Kisúga, Karúma, Atáda, Fauvera, Koki, Mrūli), two entirely distinct languages are spoken, one of which is divided into two perfectly distinct dialects. In Karúma and Atáda, as also in parts of Fauvera, as well as in the districts bordering on the middle course of the Somerset Nile, the people speak Shifalú, a language perfectly identical with the Shúli language. The negroes who are acquainted with the Shíluk language assert that the Shúli and Shifalú languages are identical with it. If this be the case, it is a very interesting fact, considering the distance, and also

the number of tribes who dwell in the intervening region (Dinka, Nuēr, Eliáb, Bari, Madi). Unfortunately, at the present moment I have no Shíluk vocabulary at hand. The dialects spoken in all the other districts just mentioned belong to the Magúngo language, the most southerly branch of which (Masíndi, Londú, &c.) is called Madundí, and resembles Kigánda.

The porters required for forwarding my baggage were gradually making their appearance from the surrounding villages; and after they had been given a day of rest, and, what was probably more welcome to them, an ox for slaughter, it was time to think of the further journey. During light rain, which, however, soon ceased, we next proceeded southward, afterwards to take a more easterly direction. The whole three days' march (we reckon six or eight hours for a march) from Magúngo to Kiróto, leads through an undulating country, in the hollows of which little streams flow from east to west (Khor Zalia, Khor Varingo). The whole stretch of country is covered by grass, so that horse and rider, much more wanderers on foot, are entirely hidden in it. Scattered throughout this sea of grass are Leguminosæ, ten to fourteen feet high, with yellow blossoms, tree-like Solaneæ, tall thistles, single trees (Kigelias, Mimosas, Combretas, and a few euphorbias), and in some places the tall spikes of an aloe, covered with hundreds of beautiful red tubular blossoms spotted yellow. The monotony of the way is often broken by a banana plantation, upon which all the energy of vegetation seems to have concentrated itself; and now and then one comes upon a hut, or a group of huts, apparently deserted; but that the inhabitants are not far away is proved on the one hand by the extensive cultivation of sweet potatoes (*Batatas edulis*) and sesame, which are constantly met with, and, on the other, by the presence in the huts of all sorts of household utensils. The huts themselves are circular in form, with hemispherical roofs reaching to the ground, and they are divided into two compartments. The first compartment is for use by day, and has a sort of corner divan, and the space behind, which is completely dark, is devoted to the fireplace, storehouse, and sleeping-room. Near to one of these huts I found a plant

entirely new to me; having a stem about forty inches high, three to four inches thick (resembling that of the yucca), it grows to the height of about eight feet, the foliage dark green, rather broad, lily-like leaves two feet long, which, alternating with striking regularity, encircle with their bases more than half the stem. I have seen the plant only once since, between Londú and Kisúga, again in the neighbourhood of huts; yet I learn from the inhabitants that it is to be found here and there, and that the blossom is white.*

In all directions well-worn paths cross the country, a testimony to the intercourse of the natives among themselves. A solitary Doléb palm marked the ascent close to Magúngo. The last part of the road to Kiróto is rendered almost impassable by the luxurious and entangled growth of grass; masses of reeds of imposing height and great breadth often intrude themselves between the grasses, and add not a little to the difficulties of the way. The bamboo proper is apparently not to be found here. Where there is an accumulation of water in the hollows of the ground, vegetation develops in overwhelming abundance. One is often compelled to use considerable strength in forcing one's way through; and it is hot to suffocation in these thickets, in which the odour of decaying plants blends with the strong perfume of certain Compositæ. Strange to say, all animal life appears to die out of these grass forests during the day; one hardly hears the twittering of the birds or the distant trumpeting of the elephant; even the traveller is silent, and presses forward, anxious to reach some open space. At night, indeed, it is otherwise, as I often discovered during the previous year upon the endless prairie, over which one travels for five days between Fatíko and Fauvera. No sooner does the moon flood its silver light upon the grass waving in the night breeze, no sooner do fantastic shadows close around the traveller, than the land is filled with ghostly life. There is a rustling and a surging; the spell is broken—the animal world awakes.

Near Kiróto grow lofty Spathodeæ, with their magnificent

* This plant is easily recognised in a photograph of a group of trees which was taken by Richard Buchta on the Somerset Nile, and which has been published by him in his "Album of Photographs."—G. S.

blossoms; a streamlet dyed red with the iron that impregnates the soil, and upon the surface of which played all the colours of the rainbow, flows towards the west; and the station itself lies at the foot of a hill, upon which fragments of gneiss and quartz are scattered. This little establishment at Kiróto, the most southerly of our stations, is a paradise for the collector. Forests, fields, rocks, bogs, and short swards, all unite to harbour every species of animal and plant. Unfortunately, I was not able to remain here long.

Any number of cultivated plants grow round this place—tomatoes (which grow wild in masses), solanum, melongena, maize, lubia, arachis, voandzeia, bamia, and sesame (which has red blossoms, although generally in the Sudān they are white). Towards the south and east are dense forests, and in these the wild anona mingles its large bluish-green leaves with those of the wild vine, from the branches of which heavy clusters of grapes hang down. The *Abrus precatorius* twines round the trunks, presenting its well-known red kernels with black dots. Everywhere is found the red-ribbed *Musa Ensete*, the black angular seeds of which are greatly prized in the manufacture of necklets. All sorts of beetles and worms crawl in the thick muddy water, and the wet bog seems particularly attractive to the butterflies, for above it numbers of them, especially the beautiful Equites, flutter. Quantities of curiosities, including colobus skins (these monkeys must abound here) and very pretty pottery made from the usual black clay of the country, enriched my collections. *Torcus erythorhynchus* struts about the fields, yet in no way could I obtain possession of specimens, and if I had, there was not time to skin them.

At last, with a heavy heart, I had to leave Kiróto. We set off in the fresh early morning, the high grass sprinkling its dew upon us in myriads of glistening drops. How much our toilet was improved by this shower-bath can easily be imagined. Often enough on such marches I have envied our Negroes, who, hanging a skin in front of their bodies, obtained very good protection, while I was wet and shivering, a victim to my own civilisation. A ceaseless monotony envelops the traveller upon these marches, grass and isolated trees, and reeds of gigantic dimensions, often forming regular walls on

either side. Sharp and prickly Cyperus and Vossia grasses intermingle with randia and mimosas. Quite unexpectedly one gets a sudden blow from some hidden tree-stump, or a tear from some prickly thorn, of which the most destructive are thistles, six feet high, with large leaves, snow-white on their under side, and round white or purple heads. From this point the elevation of the land increases considerably; many mountains rise in the midst of the high hills. The drainage is now directed towards the east or north. Banana groves alternate with large rounded blocks of quartz and gneiss rubble. We marched rapidly on until we reached the station of Masíndi, not to be mistaken for Baker's residence of the same name in Kabréga's country. A motley confusion of huts and straw fences surrounded by a stout stockade of tree-trunks forms this newly built station, which is situated upon the flattened summit of a bare iron-clay hill, and which obtains its water from a dribbling brook at the foot of the hill. The place is surrounded by extensive fields of sweet potatoes.

Anfína, chief of the whole of the Magúngo and Shifalú districts, as well as ruler of a part of the Lángo country, has his headquarters here. He is a portly, well-dressed man of middle age, whose light complexion, orthognate face, and well-developed ears, as also his white teeth and well-shaped nails, betray at once his descent from the Wahúma, the well-known light-complexioned shepherd race. Anfína, whose acquaintance I had already made, is distinguished from other chiefs by a certain inborn tact; he never asks for anything. After receiving a few presents, and telling me that his authority extends now far into the Lángo country, he offered me guides and porters in case I should wish to make a journey thither, for the Lángo will not act as porters. He was surrounded by a number of these handsome people, easily recognisable by their curious wigs, and the peculiar way they dress the hair, and also by the copper rings which pierce their lower lips and ears; but although I took much trouble to ascertain something about their country, I was not successful, for they seemed to be frightened at the sight of a white man, the like of whom they had never seen before.

A march of four hours took us to Masíndi, where Baker lived. On the way we crossed over two *khors* choke-full of papyrus and thick black mud. Here for the first time we met with the "gallery" woods described by Schweinfurth. Trees towering to the skies and hidden beneath lianas and creepers of every kind entwined into airy festoons; delicate date shrubs and trees; an abundance of low underwood, among which is the pretty leaved acanthus; entada, with its long chequered fruits—all pervaded by a cool deep shade—an enchanting picture. We crossed the ridge of another hill with broad slabs of gneiss and mica schist, and another little *khor*, and arrived at a small clearing, in the midst of which a colossal sycamore afforded us welcome shade. It was here that Baker erected his house, and often probably he enjoyed its shade as we did now. All view was shut out by high grass. Around the tree were numerous deserted fireplaces, and a giraffe skull was fastened to the trunk, showing that this spot is a kind of holy place. Once more we went up hill and down dale, across small *khors* decorated with beautiful high fan-shaped ferns, and then a short march brought us to Londū, our farthest outpost in the enemy's country. Our old friends welcomed us heartily; it was with them that we first pushed forward here last year. They live here shut off from the world, and not too comfortably either, for now and then sharp skirmishes take place around the strong stockades, where not long ago Kabréga's life-guard, the far-famed Banassura, held their orgies. I was detained here for several days by a considerable amount of official business, on account of which, and also of the present insecurity of this district, my stay was unfruitful as far as my collections were concerned.

Londū is situated upon a high hill. My observations with both aneroid and boiling-point thermometer indicated a height of about 3900 feet, which corresponds very well with the height which Baker gives for Masíndi. The hill, falling steeply in the west and south, permits an extensive view over lofty hills and extensive woods, and on the horizon there appear several high blue mountains. The Lúri mountains, on the western shore of the Albert Lake, are also clearly seen, and

in the mornings a thick layer of fog plainly indicates the situation of the lake.

Towards the north, the east, and south-east high isolated hills rise up, practically forming defiles which entirely block communication between the east and west. Many fields of sesame, durrah plantations, half withered for want of rain, scattered banana groves, and many huts, at present deserted by their inhabitants, indicate a very dense population. Unfortunately, it is impossible at present to have any intercourse with the inhabitants. My stay here was not exactly pleasant; cold, raw days, during which much rain fell (too late in the season, unfortunately, to benefit the harvest), and nights disturbed by minute black flies and fleas, a great source of discomfort to the wanderer.

Although the flea does not exist in the Sudān—I speak of the Egyptian Sudān—and is only met with as a curiosity introduced from Egypt, it is, as I only too well remember, very abundant in Ugánda. I was obliged during my residence there last year to have the floors of the houses cleared of the layer of hay covering them and washed, before it was possible to live in them.

I had the pleasure of a most interesting visit from an independent chief named Kīza, who had heard in some way of my arrival, and came to see me. He gave me a great number of valuable notes about the country and people, habits and customs, and after receiving some suitable presents he parted from me highly satisfied. From Londū to Kisúga is only a short march of $3\frac{3}{4}$ hours. After passing the steep hilly descent, at the base of which there remains a little rain-water, the way leads continually up and down over very hilly country, in an almost always easterly direction, through high grass interspersed by many trees. Many glades are seen, in which tree-like Solaneæ grow luxuriantly with orange-red and yellow fruits; they point to former cultivation, as do many bananas and deserted hearths. On the slope of the hill I found the second specimen of the beautiful lily already mentioned. Entada, eriodendron, combretum, ficus, sterculia, spathodea, covered with blossoms; mimosas forming real shrubberies, and graceful date palms wherever a small swamp occurs at the foot of a hill; the

margins of the *khors* are fringed by "gallery" woods. We marched between two mountain chains which run in an easterly direction; and after we had permitted our porters to take some rest, and then journeyed round a considerable pool of water, upon the edge of which an indescribable picture of luxuriant vegetation enchanted us, we climbed right up over granite and gneiss blocks, ever upwards across the bare red land (where is found a shrub much resembling a species of Solanum, with woolly leaves, small yellow and black flowers, and a small white apple-like fruit), until, bathed in perspiration, we reached the summit of the mountain, and arrived at the station of Kisúga.

This place also is situated on one of the many hills that are scattered over the country, now rising separately out of the comparatively level ground, now uniting by twos and threes to form small groups. They are composed of granite and gneiss enveloped in a layer of rich bog-iron ore, which, again, is covered by a deep layer of vegetable mould. The water collected at the foot of this hill has no outlet, yet all the *khors* farther on flow towards the south-east, and probably convey their water to the great Khor Káfu, which joins the Nile at Mrūli. All the water is coloured deep yellow by oxide of iron, but the presence of iron is not perceptible to the taste.

Although fragments of rock (red-striped quartz) are scattered all over the ground, the crenelated structures of the ants rise to a height of seven feet in all directions. These creatures often abound on a red clayey soil. Frequently when I wake up in the night I hear a noise on the roof of my hut like the pattering of heavy rain, for even in such places the indefatigable ants build their passages and destroy the work of human hands; indeed, our life here in the interior of Africa is a constant struggle with the superior forces of nature and the overwhelming life of plants and animals. In all directions there extends a wide and rolling plain studded with beautiful trees; the blue mountain masses of Kadúku, Súmbiye, &c., stand out upon the horizon, while the lower Síri-Síri marks the road to this place. Kisúga is a very roomy, clean, and airy station, divided into regular quarters, and on account

of its elevated site is one of the best and healthiest which the Government possess here. The banana plantations far and near supply it with food. Unfortunately the want of rain this year has prevented all fruit from thriving. Red amaranthus and lovely grass lilies beautify the surroundings, winter crows (*Corvus scapulatus*) and small vultures sit on the trees waiting for food, while guinea-fowls and turtle doves approach quite close to the station.

Near the enclosure a smithy is erected, in which a native makes *molut* (shovels), and occasionally a spear-head or a knife, out of the iron smelted here. Two earthenware vessels, in form like flattened retorts open at the top, are covered with a piece of skin loosely stretched over them, in the middle of which a hollow stick is fixed and made air-tight. These are the bellows; and the stream of air produced by the pulling up and pushing down of the stick is forced through a wide clay pipe into the fire made in a shallow hollow in the ground. A large lump of compact iron serves as an anvil. The iron that I saw was of very good quality.

Intercourse with the natives in all these newly established stations is naturally very limited, and therefore the collection of notes and information, as well as the observation of their customs, is hardly to be thought of. The language of these districts is Magúngo, which appears to be spoken also by the Umiró.

We had now only to visit Mrūli, the most easterly station in the district at present occupied, and there our final preparations for a march into the interior were to be made. It may sound strange when I say "the interior," for Mrūli is situated in lat. 1° 37′ 43″ N. Thanks to Gordon Pasha's eminent talent of organisation; thanks to his three years' really superhuman exertions and labours in a climate which very few have hitherto been able to withstand; thanks to his energy, which no hindrances were able to damp, the whole immense country from the 9th to the 1st degree (Sobat to Mrūli) is so well organised and so entirely secure that a single traveller can wander through the length and breadth of it with all the comfort that is here attainable, and can carry on his studies in peace. Arms and ammunition, except for pur-

suit of the chase, are certainly not required. Only one who has had any direct dealings with negroes, and has been dependent upon them for the transport of goods, the supply of provisions, &c.; who has seen and experienced the glowing sun and the fever-exhaling swamps of this territory; who knows what it is to be for long years shut out from all society, and to dispense with the most ordinary comforts of life, can form a true estimate of what Gordon Pasha accomplished here. He was obliged, moreover, to create for himself the material with which to do his work—and upon negroes he had to rely!

In pouring rain we descended the steep hill of Kisúga, and passed the saddle-back where last year, when engaged upon a peaceable exploration, we were first greeted by the volleys of Kabréga's bodyguard, a greeting which was often our portion during a three days' tedious march through the almost impenetrable grass and bush. We then entered again into high grass, above which the long branches of the eriodendron towered aloft in scattered groups. The *Bassia Parkii*, which we previously saw so often, has become very rare during the last few days. Besides the red castle-like ant-hills we saw along this part of the road another kind of structure, specimens of which stand along the path like huge grey mushrooms. The path seems to be much frequented by elephants, for we found newly broken-down trees scattered about; but no animals of any kind were to be seen. The high grass became gradually replaced by open park land and very beautiful scenery; the broad, well-dried path upon the red clayey ground often expanded into small open places, the borders of which were framed with short turf; trees and bushes formed themselves into groups, the red blooming canna being everywhere abundant. Here and there in rocky ground, depressions formed natural reservoirs for clear rain-water. The descent from Kisúga to Mrūli was very considerable.

During the last part of the route two species of mimosa were added to the already far too numerous thorns and prickles, the one with yellowish green bark and long snow-white thorns, the other one, well known through Schweinfurth, the *Acacia fistula* (Arabic, *Um Suffara*), with snow-white vesiculate thorns and white bark, giving to the tree a very peculiar and unique

appearance in the twilight. It is very abundant at about 8° N. lat., but is seldom met with again until this district, where it abounds.

When we left the river at Magúngo a Doléb palm bade us good-bye, and here two similar palms indicated our approach to the river. A long distance off a solitary tree was tipped with gold by the setting sun: it was the tree under which, in Kamrási's time, Baker so long resided as a prisoner. It marked the *meshra* or landing-place; for Khor Káfu had still to be passed before we reached our destination. Ferry-boats, signalled for by some shots, were loaded in bright moonshine. Backwards and forwards they plied, until at length all our goods had been ferried across; and then we entered the boats, enveloped by a swarm of mosquitoes, and after a ten minutes' journey across the sluggish waters of the *khor*, through enormous masses of papyrus and grasses, we reached the landing-place. There, notwithstanding the late hour (9 P.M.), a number of old acquaintances awaited us, and accompanied us to the huts prepared for our reception. After a few hours of chat, the monotonous *Gardez!* of the sentries brought the tumult of the day to a close, and we could at length seek rest: the first part of our journey lay behind us.

3. From Mrūli to Rubága in Ugánda.

(Letter to Dr. A. Petermann, from Uganda, December 18, 1877.)

WAGANDA PORTERS—THROUGH SWAMP AND MUD—IN MREKO'S VILLAGE—UGANDA TOBACCO—DANCERS AND SINGERS—PATHOLOGICAL—THE BIRD WORLD—WAHUMA TYPES—COLOCASIÆ—BANANAS—AN UNEXPECTED ATTACK—THE LEGEND OF MOUNT SEMPA—COUNTRY LAID WASTE—NUDITY OF YOUNG GIRLS—LETTERS FROM MTESA—OUR LAST MARCH AND ARRIVAL.

I was compelled to wait in Mrūli for a whole month, until the guides and porters who had been requested from the ruler of Ugánda at last made their appearance. They informed me that the country lay under water far and near, and that all former roads were completely inundated and closed to us. We were therefore obliged to find a new road, an announcement which naturally highly gratified me. So the people, who had brought a large number of cows, tobacco, and coffee-berries to barter, were granted a day's rest; and not till the 20th of November did we begin our march through level alluvial land covered with grass of medium height, in the midst of which a tall Doléb palm, visible from a long distance, stands out as a landmark. Khor Káfu, which runs to the right in numerous windings, approaches the road above this palm-tree. The road skirts it for a short distance, and then turns away to the east.

Every now and then on either bank are patches of pure white sand and very open mimosæ woods, between which the blue masses of Jebel Kadúku and Jebel Kisúga become visible in the west. Not far from here, to the right hand of the road, is the spot where, three years ago, Linant was obliged to fight Kabréga's people for the passage over the Khor Káfu. In all the hollows of the ground are water and black mud. Open woods with low trees border the road. I observed Mimosae with white thorns, species of Ficus, Combretæ, now and then a vitex, and solitary Doléb palms. The last only attain a height of thirty or forty feet, and are not to

be compared with their giant sisters growing farther north between latitudes 8° and 10°.

The porters having been twice permitted to take a short rest, the rapid march continued. The Wagánda are splendid, indefatigable porters. Following the sound of the drums which called to us, we arrived early at our night's quarters, consisting of several huts surrounded by plantations of sweet potatoes, a solanum with edible red berries of the size of cherries, and some bananas. The place is called Btuti, and belongs to Kabréga. From there to our next night quarters, Kyivambiri, was a hard march of over eight hours, rendered more difficult by enormous pools of water extending far and wide over the gently undulating land, and fringed by small date palms. No attempt at cultivation breaks the everlasting monotony of swamp, water, and Cyperus grass. No house invites the stranger to enter and rest a while. Groups of euphorbias and mimosas form the only relief to the swampy land covered with tall grass, in which thousands of black and white striped mosquitoes hold their concerts. The night was not rendered more comfortable by the occurrence of two thunderstorms at an interval of three hours from one another; and we were glad when, early in the morning, after the usual delays, the march was recommenced. At the beginning of a march, every one tries to seize upon the lightest load; many endeavour, by hiding themselves, to avoid their duties altogether. When, however, after long debates, accompanied by the personal intervention of the chief, the people get the luggage once divided, then there can be found no better porters or more enduring than the Wagánda. Boys of ten or twelve years of age carry loads bigger than themselves.

The water stood everywhere knee-deep upon the perfectly level plain, thickly grown with grasses. A path eighteen inches or two feet broad led us through this chaos of water and mud. Where elephants had used it, their visits were plainly indicated by holes, into which we sometimes fell. We saw troops of elephants and small herds of buffaloes at a distance from the road, enjoying themselves in the mud. If our caravan approached them the buffaloes rushed madly away, kicking up the water behind them, whereas the elephants

retired at a short trot. Very noticeable were the swarms of small butterflies which flew round us in the middle of the swamps, often alighting upon our hands. Throughout this swamp land small patches of higher ground form occasional islands. They are thickly covered by low mimosas, and many of them are crowned with groups of gneiss blocks some ten feet in height. One wonders how it is possible for them to have found their way into the middle of this level swamp land. So we marched on through thick and thin, and when I remarked to the leaders that they might let us halt for the day, as the porters must be tired by wading through the mud, I was told that our quarters for the night were quite near. It turned out, however, that they were at least three hours distant, which will give an idea of the Wagánda's marching powers—when they *do* march.

At last the country commenced to rise slightly, the red clayey ground being covered by a dense wood of prickly mimosas; and a large, well-cared-for banana grove, in which there were many nice huts, provided us with a halting-place for the night. As usual, the entire population of the village had fled, with bag and baggage, on our approach, leaving us only the empty huts. The banana grove, however, was full of fruit, and quantities of ripe durrah, maize, and *Sorghum saccharatum*, as well as sweet potatoes, furnished a rich table, to which, after the fatigues of the march, we did full justice. During the day we had had heavy showers, but in the night it poured in torrents, and when we started early next morning the clouded sky looked very threatening.

As far as the eye can reach, level lightly wooded ground stretched out before us. It was covered in many places by mud and puddles of water, but the dry patches were more numerous than the day before. The soil for the most part was a grey clay, abounding in vegetable *débris*, and overlying the thick stratum of red ferruginous clay which extended far and near. On our arrival at the Dubenge marsh, the waters of which flow off to the river Ergugu, a short halt was necessary in order to make our swamp toilets. All strictly unnecessary clothes, together with the hundred and one small impedimenta which a traveller requires every moment on

the road—watch, compass, aneroid, &c.—were made up into a bundle and carried upon the head. The water reached up to our necks, and was filled with the decomposing detritus of plants. The rays of the sun were scorching, and clouds of mosquitoes took the opportunity of attacking us with impunity. Slowly the porters marched forward, feeling each step of the way with their spears. Their work was almost superhuman, but still no single load was dropped in the swamp! the crossing of which lasted nearly an hour, when we again reached the solid ground. With the passage of this swamp we left Kabréga's land behind us, and found ourselves upon Mtésa's territory.

The district of Kahúra, the first we entered, is under the government of the great chief Mreko. He was our guide, and had consequently to do the honours of his land. The village of Kiramba, lying in the midst of a large banana grove, is composed of very many huts, and encircled by fields of sweet potatoes and violet-flowering lubias. Two or three houses, each surrounded by high colocasias, form a small group, in the midst of which is situated an empty miniature hut dedicated to the higher powers. A fig-tree hung with large shells, an aloe with beautiful horizontally white-striped leaves, and a species of Liliacea called "Mramra" are invariably to be found near these votive huts; and aromatic plants or beautiful flowers are often grown near them.

Late in the evening I received the very pleasing intelligence that one of the guides had got a thorn in his foot, and could only march with the greatest difficulty. He was willing, notwithstanding, to proceed on condition that the march should be very short, and requested that I should be indulgent to him. Full well I knew that this was only an excuse in order to obtain an opportunity for the porters to have a good bout of drinking *mvénge*, the intoxicating banana beer. But what could I do? Our next day's march was, indeed, only too short, but it permitted me to shoot to my heart's content pigeons and guinea-fowl, of which there are immense numbers here. Rolling, well wooded ground provides them with good shelter, and extensive fields of sweet potatoes and *Eleusine coracana* (used in brewing) afford them abundance of food.

Kattyang beans also are extensively cultivated here. From this place we passed through a small swamp, up to our waists, and reached Bzággara, where we were to halt for a day's rest.

The Ugánda language possesses two words for tobacco—*taba* and *mtéri;* but I cannot at present decide whether *mtéri* means *Nicotiana rustica* and *taba* exclusively *N. Tobacum* or not. In Unyóro also we find two words for tobacco, namely, *tába* and *irkábwë*.

I was favoured by a visit from a minstrel. He was decked with the fleece of the long-haired Usóga goat, and disguised by a long white pointed beard, which partially concealed his mouth and only permitted him to mumble. After he had seated himself in the middle of a circle of spectators he began with supple fingers "to strike a chord" upon a seven-stringed guitar. A short prelude developed into a recitative of simple rhythm, praising the beads and the generosity of the white stranger. As the song proceeded, the long beard commenced regular up and down movements, and it was very droll to see how the singer, bending his head to the right or to the left upon his shoulder, made his beard dance in time to the guitar. The chief effect, however, was when he bent back his head upon his neck, so that the beard pointed directly upwards, in which position he gave forth a long gurgling r-r-r-r-r-r, to which the beard vibrated, invariably provoking peals of long-continued laughter. The bard was rewarded by some glass beads, and by way of thanks he stretched himself flat upon the ground, and placing his open hands together, made the vertical movement of thanks, saying at the same time "*Nyanzig*," after the Wagánda fashion.

The pleasures of the evening were indeed crowned by the festivities of night, for at midnight a tremendous thunderstorm broke over us, and as the rain came down in streaming torrents, my tent was overthrown by oxen who were frightened by the constant lightning. My people, as usual on such occasions, were sleeping the sleep of the just, and so there was nothing for it but, in the midst of heaven's floods, to put my traps to rights myself as best I could.

I had hardly returned from shooting guinea-fowl—an occupation always possible here—when a troop of my porters

appeared, bringing towards me in their midst a very grotesque figure. Its body was decked with bunches of green leaves, upon its head was placed a wreath of straw, the blades of which stood upright, and its legs and arms were encased in green leaves; and thus decked out this new performer was led up and down by a rope tied round his neck amidst universal "holloas." Then he began to dance, the time being kept by the hand-clapping of the spectators. Shaking and trembling movements of the body, the feet being fixed, alternated with hopping round upon one leg and deep obeisances; until at length, completely mastered by fatigue, he closed his entertainment with the usual pantomimic thanks.

Many of these people have large white patches upon their hands, caused by a loss of pigment, and possibly connected with syphilis. I had the opportunity of seeing the same affection many times in Ugánda last year. The skin over the parts affected shows no signs of altered texture, nor is any palpable difference to be felt; women often suffer from it. It is a curious fact that from about 3° N. lat. to the equator the *Filaria medinensis* or guinea-worm appears to be entirely unknown, whereas farther to the north it is one of the most frequent diseases. The same causes which apparently give rise to the disease in these latitudes are far more potent here, but it is true that some negro tribes appear excessively predisposed to it, whereas others are almost entirely free.

Notwithstanding that since midnight it had poured in torrents, we commenced our march early in the morning, heartily glad to escape the indescribable plague of gnats; and, as if to reward us for our exertions, the sky became gradually clear, at least clear enough to permit us to enjoy a comfortable march. Laughing and singing, the men hurriedly advanced, for that day Mréko's headquarters were to be reached. The porters actually danced along, often raising with both hands their loads high above their heads, singing in chorus, accompanied by horns and flutes playing, and interspersed with loud cries and calls, Mréko's big drum breaking in now and then with its droning tones—a striking if inharmonious concert. Forward, through deeply undulating park land, broken up by many swampy patches, we advanced almost at a trot. At

length, owing to our ascent into drier ground, the narrow path widened out into a well-kept broad road, bounded by trees and gardens. The farther we proceeded the more beautiful and highly cultivated grew the land: luxuriant fields of sweet potatoes, juicy green tobacco, yellow-flowering ground nuts, fields of maize and sorghum, all divided from one another by cleanly kept paths; whilst in the background there were groves of bananas, in which not a weed is permitted, splendid fig-trees of different species, tall euphorbias, and thickets of climbing plants.

Naturally the bird world was not wanting there. Hundreds of splendid astrilds and amadinæ fluttered in and out amongst the dense foliage; everywhere the weaver-birds had hung their swinging nests; flocks of guinea-fowl scrape up sweet potatoes; we heard the "bellowing" of the schizœrhis, flying in pairs; white-breasted ravens stalked about the ground, and high in the air the kite (*Milvus parasiticus*) flew in ever-changing circles. Many large huts lay scattered in the fields; their inhabitants stood in groups upon the way, many clothed in white cotton stuff. "*Otiano, nyo, nyoge*" was the greeting we received in passing. Shots echoed in the air, and, accompanied by hundreds of spectators, we arrived in a large open space where huts had been prepared for our reception.

My tent was hardly erected before a man, a perfect stranger to me, brought me a bunch of ripe golden bananas, a sign of welcome, and Mréko took leave to greet his wife and children. It was afternoon before we had made ourselves at home, and the rain had hardly stopped for a moment when a procession approached my tent. It was led by Mréko and Kanagurba, both clothed in white vestments. They were bringing me presents: baskets full of large red sweet potatoes, bunches of green and ripe bananas wrapped in green leaves, enormous gourds full of frothy *sandi* (fresh banana wine, a very pleasant tipple), small native hens, and a long-legged cock of the bastard race, whose ancestor once found its way here from Gondokóro, a black, high-humped cow, and—rarity of rarities—a dozen eggs in a pretty little basket. Both gentlemen had, as their somewhat thick speech indicated, done all honour to the banana wine, which was even then being offered

to them by kneeling servants, and they were in consequence a little excited. Still, they showed themselves entirely at their ease, drank their coffee, and—now comes the point—they begged me to remain here a few days. Mountains of bananas, piles of eggs, rivers of wine, were held out to me as inducements; and when I at last, half laughingly, half angrily, consented, their joy knew no bounds. The whole company, flourishing their spears aloft, danced round me, and the pouring rain alone put an end to their expressions of gratitude. The sound of the *mandinda* (a wooden harmonica), and the songs of the women in honour of their lord and master, filled the air until late into the night.

For eight days it had rained incessantly. The rain had long since ceased between Ladó and Fatiko. Between Fatíko and Mrūli (3° 1′–1° 35′ N. lat.), perhaps, an occasional shower still fell; but here there was rain every day, and frequently from three to four times in the course of twenty-four hours.

I was regularly besieged in my tent, especially by women, who came in great numbers to look at me. Nevertheless I cannot complain of actual molestation, for the people were well behaved. I also met here an old acquaintance, Matóngali Mbazi, who had visited me in Kabréga's capital, and who had heard in his village, which is situated about four hours away, that I was here. He now came to greet me, and to bring me a sheep. He himself belongs to the Wahúma race, who are entrusted with the care of the herds. Several of their women came to me to-day; they are characterised by their pretty oval orthognathous faces, rather well-developed ears, and beautiful large eyes, varying in colour from light brown to yellowish grey. The girls of this race are highly thought of in this country. It would be exceedingly interesting to discover if the Wahúma possess the remnant of a language of their own, and to what origin this remnant points.

A long break in the rainfall permitted the crescent of the new moon (December 6th) to be seen, and it was greeted by salvos of guns and the beating of all the drums in the country. The atmosphere was so clear that both the *dark part* of the moon and the illuminated rim were visible. I have never in

my life seen anything equal to it. To-day I obtained as booty a huge antelope. The animal, which outwardly resembles the hump-backed bullock (*Antilope oreas*), is found everywhere in small herds. A magnificent black mane, with a rich bushy growth of hair on the forehead and under the neck, a well-marked hump, and majestic horns, which, in the case of my specimen rise straight up after one and a half turns, distinguish this animal. Its fur is short, crisp, and buff coloured; its back is marked by a black longitudinal stripe, from which twelve white stripes pass round towards the belly, running parallel to each other and of about a finger's-breadth. My specimen, a full grown male, provided meat for the whole of our caravan.

The marches from here to Mtésa's residence have one feature in common, they are all quite short; and it is impossible, even by prayers or threats, to urge the people to make longer marches. If a village lies in the way a halt is certain to be made in order to drink and to rest, and, if a day's march lasts longer than two hours one may think oneself fortunate. The stores of beer at last appeared to be exhausted in Mréko's hut, and so he decided to make a start. A short march led to Khor Ergugu, an enormous morass, the waters of which form the chief supply of Khor Káfu. Neither water-channel nor current was to be seen; grasses, mud, and water, reaching breast-high, filled a gully running between two rows of hills from the south-east to the north-west, which took us fifty minutes of laborious wading to pass through. Then came plantations, sometimes close together, sometimes lying like islands in the middle of high grass. Kangani's territory, Berámese, here abuts on Mréko's district. After we had passed through another bog we stopped for the night at a small village called Kapéki.

In the house which was assigned me there hung huge baskets used for storing corn and in the preparation of *mwénge*, and gourds and small baskets were lying all about. Before the door were hung an immense number of curiously shaped stones, small gourds, eggs, and half-charred pieces of human skulls as amulets. The skulls, when thrown in pieces on to the fields, are believed to increase the fertility of the soil.

Dracænas and aloes grew near the house, and colocasias surrounded it. I noticed for the first time here, and often subsequently, that on the under surface of the colocasia leaves there is a blackish green lobe-shaped excrescence, chiefly along the ribs of the leaves. Hardly a leaf was free from it, and yet the plant did not seem to be affected by the parasite, but was in a very flourishing condition, which was probably due very much to the frequent trenching of the earth around it. In my opinion the roots of the colocasias afford the most tasty vegetable to be found in Central Africa.

There was no change in the landscape during the following march, which led through the wet, muddy bottom of the valley between two parallel ranges of hills. Swamps with elegant date palms, hills which transversely cross the path or run alongside of it, banana groves, and houses, succeeded each other in motley sequence.* In the middle of one of the swamps the sound of a big kettledrum, which signals the approach of a person of rank, was heard, and shortly after, Matóngali Nyakabua, chief of all the Wahúma herdsmen in Mréko's district, passed us after a short greeting. His people, with spears, and bows and arrows (very seldom seen in Ugánda), carried on their heads their chief's baggage carefully wrapped up in bark mats and skins. Soon afterwards the village of Irkábwe was passed, and its inhabitants did not run away, whereas hitherto all except Mréko's people had fled before us. At last we reached Gúru, where we halted for the night, as it threatened to rain. I was to enjoy the luxury of a house that night, but had first to receive Mtésa's messengers, who brought me his greetings, and after resting for a moment, took their departure. According to their account, the rain was pouring down in torrents every day at Mtésa's, and the whole country was flooded, which I could easily believe, because it had only rained here four times that day, and yet we had been wading half the way in water breast high. The seams of my boots were splitting open, as the constant wet had caused the thread to rot.

In spite of repeated calls, the people only made their appearance this morning after I had sent for them three or four times, and even then they hesitated a long time before starting, because the sun had not risen high enough to warm the water through

which we had to go. At last, after a vast amount of persuasion, we started, and went right into the swamp, which is here nearly two miles broad. At first we were only knee-deep in mud, thick grass, and papyrus, the appearance of which so far from the river surprised me greatly; but soon the water deepened, and we were quickly up to the neck in it, and that for a long time—longer than we liked. The loads had to be balanced on the head, and great care to be taken to prevent falling, especially as the mud was tenacious like pitch, and stuck to the soles of our feet. Added to this were the burning sun, the gnats, and the bad-smelling exhalations from the swamp—a real African treat! Step by step the procession moved forward, and, *mirabile dictu*, this day again no harm befell us.

The playing of flutes and noise of song celebrated our arrival on *terra firma*, and after crossing the low hills which dam up the swamp, we plunged again into the banana groves, until a large open space with shady trees bade us rest. The porters, whose unshaken good-humour was again a source of wonder to me, well deserved the huge vessels full of *mwénge* which were quickly requisitioned from the surrounding houses; and my guides, too, after conducting a sham fight, did not neglect to indulge in the pleasure of a drink. This very straggling place is called Táma. Masses of bananas, a great deal of white maize and red durrah, both ripening, sweet potatoes, and a very large number of colocasias grow here. The latter seem to have run wild in the muddy soil, which suits them well; at any rate they cover the land for a great distance, while usually they are only found singly, planted round huts. Their tubers are very large, and are pure white.

The banana plantations are generally very well kept; but once a year the grass in them is allowed to shoot, and is then pulled up and placed in great bunches around each banana plant, this being the only manure employed. When the rotting is at an end, which very soon takes place, absolutely no blade of grass can be found between the stems, and the grove looks like a huge and very carefully kept garden. There are in Ugánda three kinds of bananas, which are known by the natives through their leaf and stem—*Keyk*, with small insipid fruits, used only

in the preparation of beer; *Niamunya*, the golden medium-sized sweet fruits of which have a delicious white pulp, and are used for eating as well as for the manufacture of banana wine; *Karambe*, with firm fruit of a span's length, having brick-red skins, and only employed for eating—decidedly the best kind. The natives seldom eat ripe bananas; but the green fruit, alone, or cooked with meat, forms the basis of their food. It is remarkable that many of the fruit-bearing plants show well-marked red ribs on their leaves, corresponding with *Musa Ensete*, the mother of their species, which comes often enough to the fore here, but has nothing remarkable about its shape. It is found from Fatíko (3000 feet high) on towards the south everywhere, and its large black seeds are much liked for necklaces.

The distance between Táma and Kabáru was short, and as the road seemed to lead through a great garden, we soon reached our journey's end. As regards the grass, it is just the reverse of what it was in the north; there tall grass was the rule, and plantations were only met with occasionally; here there is one cultivated stretch of land after another, and houses in great numbers, and where tracts of land covered with high grass are found, the latter seems to be spared on purpose to provide material for housebuilding. It was fortunate that I had a roof over my head, for immediately after our arrival the rain, which had been threatening since morning, began to descend in torrents.

My house, under the projecting roof of which were hung as charms small bundles of maize, lubia, and durrah, neatly rolled up in banana leaves, was full of earthen vessels, bark cloth, and gourd bottles. There were also the large baskets mentioned above, wide at the top, narrowing towards the bottom, and closely plaited, in case of being needed for the manufacture of beer. In this case a pap of bananas mashed with water is put into them, and they are buried in the earth, and covered with banana leaves and a thick layer of hay until the fermentation begins. In all the houses were suspended small baskets filled with hay, which are used as roosts for fowls, these being very small, but kept in great numbers.

There are no trees in the banana groves except several varieties of the fig, which are used for the manufacture of

cloth, and here and there a dracæna. As soon as the fig-trees are stripped, they are wrapped round with a sheath of banana leaves, in order to preserve them from insects, and to promote the process of regrowth in the bark, which takes place by means of the bundles of fibres that run out from the remaining bark above and below. The bark may be employed for this purpose until the tree is two and a half to three years old, but as a rule the same tree is only stripped twice. The first time it produces a thick coarse cloth, the second time a uniformly finer one. White-flowering, rose-tinted tobacco (*Nicotiana virginiana*) is universally cultivated near the houses. Its light-green leaves are a span long, of a sharp, aromatic odour, and the entire shrub grows to a height of about three feet. Special stands of about a foot high, made of dry wood, are erected for the gourd tendrils. White and yellow flowering species are very plentiful, and the fruit is used for eating, and for an innumerable variety of vessels, the leaves being eaten as a vegetable. Spoons are cut out of the rind of the fruit.

Late in the evening I received a visit from a lady. She was still a young woman, with stolid, expressionless face, but remarkably beautiful small feet and hands. She was attired in coloured goat-skins, richly decorated with small stones, horns, and cowrie shells, and arrived playing on a small gourd containing many holes. She belongs to a class of homeless wanderers—gipsies, I may call them—who are constantly met with throughout Unyóro and Ugánda, and who appear to be the remainder of a distinct tribe. They resemble gipsies in the vagabond life they lead, in their practice of sooth-saying, and in the manufacture of all kinds of amulets and charms, as also in their love for music.

When we continued our way next morning, the dew-besprinkled banana groves shone beneath a brilliant blue expanse of sky. There is really something very fascinating on a morning like this amidst such surroundings. Mréko, who had probably not got up enough "steam," had remained behind, and so we were soon obliged to halt amongst huts and banana groves to wait for him. The place is named Duēro, and its neat huts, often with projecting tripartite gables, nestle in the midst of extensive plantations. The red durrah

waved its loaded ears in the morning breeze; the sun lighted up in a thousand different colours the dewdrops which hung upon every leaf; flickering shadows danced around us. The houses were, however, closed by strong reed doors; their occupants were not to be seen, and soon a report spread that we were to be attacked. We therefore continued our march in close order through the high grass, which would have served as an excellent ambush for an enemy, but no enemy appeared. A short march over grass-clad hills, where now and then we caught a glimpse of a distant mountain, and through open mimosa woods, fantastically lit up in the twilight, took us to Kirembwe, where, notwithstanding my protestations, we were to remain for the night.

After a long search among the bananas, we at last found suitable huts, and soon after the cries and shouts of the tipsy porters and chiefs were heard, together with the tom-toming of their drums; like fighting-cocks the chiefs sprang towards each other, brandishing their two spears in a threatening attitude and shrieking furiously. After several minutes, however, both returned in a brotherly manner to the gourd bottles, and a deep draught rewarded them for their exertions. It was a regular beer procession. From village to village, or rather from beer-jug to beer-jug, we marched, on this the thirteenth day since leaving Mrūli.

At midday I was engaged in collecting insects and worms, when all of a sudden a spear struck the ground beside me, and at the same time several shots rang through the banana grove. Being completely unarmed, I returned to my hut, and almost close to my door a man fell, pierced through the right kidney by a spear. Two other men were badly wounded directly afterwards by bullets. In a few minutes our encampment resembled a fortification, for every one was sensible enough to return to it at once. The doors were blocked by hurriedly-torn-up banana trees, and in all the enclosures huts for sentries were erected. Our still half-drunken people stalked about fully armed, and my two chiefs, by this time thoroughly intoxicated, made a brave show with their long guns. The patrols, who had been sent out in all directions, soon returned, bringing with them some ten women

and children, three or four men, and several goats, as booty. I was at once given clearly to understand that we must now remain here two days, in order that it might not appear as if we were robbers running away with our spoil. I naturally remonstrated very strongly against this interpretation, and requested the gentlemen to set free their prisoners and the goats, for then none could accuse us of robbery. This they at first refused to do, but after the night had passed in perfect quiet, just as I had expected, they at last consented to listen to my protestations; and after we had given our wounded into the care of some neighbouring friendly chiefs, we continued our march, taking with us, however, our prisoners, who were to be delivered up to Mtésa.

The ground rose sensibly yesterday, and as soon as we had left the banana grove to-day we commenced to climb over ridges of hills, in the valleys between which were muddy watercourses. The hills ran directly across our route, which gradually rose until the heights between the mountains of Duhūli and Naduima being passed, we arrived at a number of granite blocks thrown together in groups at the edge of the first-named mountain, and interspersed among bananas. From here there opened out an extensive view across the country. This place seemed made for taking a triangulation of the numerous mountain peaks which range themselves on all sides in the distance. Banana groves, with groups of huts, green fields, blue mountains, shady valleys, and a smiling heaven, composed an enchanting picture before our eyes, and merrily we continued our way over firm red clay, right through the banana groves. A road about twenty feet broad, clean and well kept, led to our night-quarters at Kyikàsa. Upon the road we traversed to-day the *Canna indica* grows abundantly, in full red bloom, the same as that which I noticed so often last year at Fauvera. The black round seeds are made into necklaces. Notwithstanding that the plant is so common here, it does not appear to have been noticed by any traveller.

A brilliant moonlight night followed an equally beautiful day. It is a unique pleasure to sit in the deep darkness of a banana grove, and to watch the play of the ever-changing shadows which the bluish moonlight throws through the

thick foliage upon the dark red ground. An almost ghostly silence reigns over all; only at times the mighty banana leaves rustle softly, just as if they dreamed. The ghostly forms of large bats flit through the air; *Cosmetornis Spekii*, the "father of the four wings," flies silently with its long feathers fluttering; bluish lights mark the trail of large glow-worms, and buzzing moths in sombre garb are almost invisible to the eye in the darkness of the night. A deep, sweet breath of peace is wafted over the face of nature.

As usual, all my traps were packed up and placed before my hut door, and I myself was ready for the march, sitting under a tree. No porters, however, appeared, and when I, after waiting for them a whole hour, sent for my guides, they preferred not to come, but sent me word that I could unpack my goods again, as they intended to remain here both to-day and to-morrow. At last my patience was exhausted. I sent word to them immediately that they had better take good care of my things, as I intended to set off at once. My words were followed by deeds, and, accompanied only by my few people and the porters who were carrying the ammunition, I started on my way, compass in hand.

Over very high mountainous ground we climbed up to Mount Sempa, the summit of which, tradition says, no human being can ever reach, because hyenas guard the way, warning off wanderers from the mountain. Leaving it to the right, and gradually getting higher, we passed a neat *zeríba*, and shortly afterwards a village inhabited by dark-coloured Wahúma herdsmen. Six or seven houses for cattle, and two or three for herds, encircled by high, thick, thorn hedges, formed the dirty and neglected compounds, of which there were four or five on the road. On account of the character of the Wahúma, who live almost entirely on milk, cultivation worth naming was not to be seen. A small, newly planted field of sweet potatoes and a few gourd plants twining over the hedges, and that was all. From this height, which is quite covered by granite blocks, a steep descent leads to a swampy plain covered by high grass, through which a small stream flows to the east. This was the first running water we had seen since we left Mrūli.

We were now in Muambia, which district I reached last year

by a different route. Through grass and reeds the road winds by a hundred curves up the steep mountain of Kyápisi, the pass of which is marked by a single fig-tree visible from a long distance. Unfortunately, gigantic grasses shut out every view. Reaching the top of the pass, a very fruitful land spread itself out before us. Extensive plantations of every kind hemmed in the road. Heavily-laden cornfields awaited the reapers. Before the huts great heaps of green tobacco and yellow maize were drying, but no inhabitant was to be seen. No sound was heard among the silent houses, not even the cackle of a hen. A death-like silence hung over the whole land. Upon the enormous square, outside Muambia's chief village, Degéa, the grass grew knee-high, and the extensive courtyards and houses were deserted. In the burning midday sun rustled the bare branches of a poisonous euphorbia. Lizards ran quickly over the road. A poison-tree in a devastated land! For this was the explanation of the silence. Mtésa's emissaries had fallen upon this district by night and carried off people and herds, stores, and household goods, to pander to their ruler's covetousness. Pieces of newly-made *mbugu*, half-finished and delicately-woven grass mats, still lay before some of the houses; the housewives had been torn away from their work to increase the number of slaves in the king's household.

We marched on and reached the little district of Nasirïe, where human beings again made their appearance, and where all seemed to be indulging in the full enjoyment of their own possessions. Here a clear, flowing stream, journeying from west to east, babbled along in its deep sandy bed, and soon after followed one of those deep morasses that exist only in Ugánda, and about which E. Linant so bitterly complained. One sinks up to the waist in the black, thick, stinking mud, and although people have tried to erect a kind of bridge in some places with the stems of the abundant date palm, those places are just the most dangerous, because the stems, having no firm foundation, invariably roll away from under the foot when one steps on them. After sundry halts we happily regained dry ground, and marching through clean reed fences we reached the thickly-populated village Kitákuba, which belongs to my old acquaintance Kyibrango, who unfortunately was absent.

Although it was raining hard, and we were compelled to halt, difficulties were at first put in our way, but at last we were allowed to take possession of two houses; and when I gave permission for the ox we had brought with us to be killed, a lively trade ensued between my people, who offered meat in exchange for other things, and the inhabitants of the village, who brought for barter sweet potatoes, bananas, and especially cobs of maize in bundles. So our evening meal was arranged for very satisfactorily. Meat roasted in ashes, and maize cobs prepared in the same way instead of bread, are not at all to be despised. Just as we were so engaged, there suddenly appeared three of Mréko's people, who had been sent after me to persuade me to wait. Exceedingly comical was the description of these Matóngali how Mréko had inquired after me all along the way, and had everywhere been told that we had passed long ago! and how at last he naïvely asked, how in the world I had found my way alone.

Crowds of people surrounded me at every step, and amongst them many women. Specially striking was a tall, red-brown girl of about eight years old, quite naked, unless one can give the name of clothing to a cord with three pieces of wood, of from one or two inches long, hanging in front. Her breasts were not yet developed. This was the first case that I saw in Ugánda of a female being quite unclothed, but I was subsequently told that here, as in Unyóro, the girls usually go about nude until puberty. Boys of six to seven years old are very frequently seen in this state, but they always wear a small apron. Men and women cover themselves with large pieces of bark cloth tied in a knot over the shoulder; the women generally simply wrap themselves in it, making it fast just under the armpits. Both sexes, however, wear a kind of undergarment of the same material, reaching in the case of the men from the hips to the knees, and in that of the women as far as the ankles. The upper-garment is frequently fastened on by a girdle of skin or dried banana leaves.

I noticed here for the first time an abundance of sugarcane of the blue-green variety.

My things had not yet arrived, so that this time I had to sleep on green banana leaves. If only it were not so terribly

cold in the mornings! Yesterday morning at six o'clock we had 60° Fahr., and to-day only 59°, which really *is* cold. We get to the fire and miss our warm coffee, but a few maize cobs answer the same purpose, and afford warmth as well as nourishment.

To save time, I gave orders for the onward march, notwithstanding the want of my things and the threatening rain-clouds, but we had hardly passed the mud puddles just beyond the village and climbed the hill, when the rain poured down in torrents, and compelled us to turn aside into the bush, that is, to seek a small *zeriba* away from the road and rest there. After about an hour and a half the rain fortunately ceased, and we had hardly advanced a couple of miles between walls of high grass when Kanagurba's people came rushing towards me and said that he had marched past us in the rain, and was awaiting us in the banana groves that lay ahead.

The little river Kairira rushes over the road between blocks of gneiss mixed with mica; its course can be made out for a long distance by huge date palms; its water is cold, and clear as crystal. Immediately beyond it are some swamps, with the indispensable bridges made of round sticks, and then the road rises to the bananas of the village of Kasidië, where we were to take up our night quarters. Kanagurba had arrived before me, and after waiting some time, the porters too arrived with my things, led by Mréko, who came to pay me a visit. One must say this for the Wagánda, that they have an immense amount of bounce, and are, one might say, so unconsciously impudent that one gets angry with them a hundred times only to laugh at them in the end.

We had hardly settled down, when one of Mtésa's messengers, dressed in clean bark cloth, appeared with an English letter for me, which informed me that my house was ready, but that I might rest for two days at each place on the way, in order not to overtire myself. I am now highly delighted that I marched yesterday and to-day. From here to Mtésa's is only four hours, and yet I shall be compelled to spend three or four days on the way; so that yesterday's march has gained me at least four days. To explain how I came by the English letter, I think I must mention that a young Suaheli, who was once Stanley's ser-

vant, and who understands English, has for more than two years acted as dragoman and secretary to Mtésa. His name is Míta Dallington.

So we are to rest! There hangs in my house, carefully wrapped up in bark cloth, the vertebral column of a python; a piece of it bound round the bodies of little children is said to be an infallible preventive of colic and convulsions. A deluge of rain occupied the remainder of the day and the night.

When I asked my leaders to-day why Muambia's land is totally depopulated, they said that there was in Ugánda a powerful magic called *kampódi*, and that when it spreads over a land it depopulates it far and near. When I asked if this magic affected the goats, cows, and house utensils, both gentlemen were silent. From this it appears as if Mtésa always enveloped his plundering expeditions with a veil of mystery: faith or superstition does indeed always go hand in hand with cruelty.

The signals for marching had been sounding since daybreak, but the rain prevented our starting for a long time, and it was late when we were again making our way up and down hill, on a road between blocks of granite. Here and there tall grass, over ten feet high, formed a living wall on both sides of the road; but narrow paths indicated the presence of gardens and plantations behind this wall. A broad, deep swamp took up a long time, and was passed through with great difficulty, and then began the ascent which leads to the village of Kíti, near which rises the mountain of the same name. The descent led to the little stream Babínge, which was, however, swollen very high by the long-continued rain. Its ever-flowing waters empty themselves into the Mianja, the real source of the great Khor Káfu. A little further on I found all my porters collected in a banana grove, near some houses, each with a huge piece of sugar-cane in the hand, and when I requested them to move on, I was told that it was impossible, because the country in front of us belonged to the king's wives, and that no one was allowed to pass the night there, which, being interpreted, probably means that no one is permitted to plunder there. We were in consequence obliged to remain here, and as our provisions were exhausted, I requested my

guides to give me an ox for slaughter. The people had with them oxen and goats, which were given by the king as provision for myself and my people. They have, however, never given me one, as they probably wish to sell them as soon as we arrive at the capital. The name of our halting place was Debātu (not identical with Linant's Debātu), and is celebrated throughout Ugánda on account of the quantity and excellence of its bananas. Unfortunately I could obtain nothing for my journal, for the inhabitants had all fled; nor could I add to my collections, on account of the continuous rain. Never in all my life have I seen so many *Amaranthus* plants in one place as here; their red fans form regular fields; a white variety is said to exist, but I have never yet seen it. No tamarinds appear to grow here.

I was honoured to-day by another dispatch from the king. A young man, named Amara, in a dark blouse and pantaloons, whom I had seen last year, and who was accompanied by about forty soldiers clad in white cotton clothes, and armed with old flint-locks, brought me his royal master's greetings, and after having informed me that he would come half-way to meet me to-morrow, he returned with my greetings to Mtésa's capital.

At last the day for our final march arrived. As usual, on account of a thunder storm, we started late. We waded through yellow mud, which covered the road, until we arrived at the river Kandubituyu, the cold water of which flowing over yellowish white sand reached up to our middles. An hour later we came upon the Mianja, the largest water-course we have yet seen, which also had a broad white sandy bed and was filled with clear cold water. A third very small stream, which flows into the Mianja, followed, and subsequently enormous gutters full of mud, until at last the rising path bordered by bananas and leading over firm ferruginous clay, brought us to a magnificent Boswellia, which, situated between granite and quartz blocks towering one above another, was visible at a considerable distance. Upon one of the next hills I ordered a halt in order to give my people time to don their uniforms. The march was then resumed. Shots rang out; thousands of people surrounded us yelling and gesticulating; my guides marched in a long row, headed by beating

drums; and when we arrived at a cross-road at Mount Dugóba we came upon a deputation led by Amara, whom Mtésa had sent to greet us and to form our escort. Guns began to crack anew; we descended the mountain; every moment we were greeted by Mtésa's pages, who, rushing hither with guns longer than themselves, brought us his greetings, and then immediately returned. Painfully we waded through a muddy flat, then we made a short march up-hill, and fired a volley to announce our arrival. Egypt's banner waved over my hut in brilliant sunshine—we had reached our goal.

P.S.—During my second audience with Mtésa I was quite unexpectedly addressed from behind in English, and as, wonderingly, I turned round, I saw standing near me a white man, the Rev. Mr. Wilson, who belonged to the expedition which the Church Missionary Society had sent to Africa. He had been six months in Ugánda, whilst some of his companions still remained in Unyanyembe and Usukuma. On December 31 (1877) we received the sorrowful intelligence that two of his companions, Lieutenant Smith and Mr. O'Neil, during their voyage here from Usukuma, had been attacked by the king of the island of Ukerewe and murdered, together with about fifteen mechanics from Zanzibar, as well as several Arab merchants. Mr. Wilson left at once for Usukuma.

Aneroid readings made at six o'clock in the morning; the temperature of the air varying from 16° to 18° C. (61° to 46° Fahr.) at the same time:—

	Inches.		Inches.		Inches.
Mrūli .	26.12	Bzággara .	26.00	Kirémbwe .	25.87
Btuti .	25.02	Kahúra .	26.20	Kyikása .	25.77
Kyivambiri	26.10	Kapéki .	25.94	Kitákuba .	25.59
Kinamuzi	25.04	Gúru .	25.94	Kasidië .	25.63
Kiramba .	26.06	Kabāru .	25.98	Rubāga .	25.59

4. Diary of a Journey from Mrūli to the Capital of Unyóro, and Remarks concerning Unyóro and its People.

CAUSE OF THE JOURNEY—HOW THE WANYÓRO MARCH—THEIR COLOUR—LUXURIANT VEGETATION—HUTS—TRAVELLING IN THE RAINY SEASON—ARRIVAL AT KABRÉGA'S—AUDIENCE WITH THE KING—HIS CHARACTER—FAT WOMEN—A TRIP TOWARDS THE SOUTH—CHARACTER OF THE VEGETATION OF NORTHERN UNYÓRO—TOPOGRAPHICAL DESCRIPTION—A WAGÁNDA CARAVAN—RETURN.

It was in May of the year 1877 that His Excellency Gordon Pasha, prompted by the wish to be on good terms with the Negro princes in the south, entrusted me with the honourable commission to visit, if possible, the king of Unyóro, Kabréga, who, since Baker's retreat from Masíndi, had always been our enemy, and to try and bring about a peaceable solution of existing difficulties. Favoured by fortune, I succeeded in my mission, and the following pages are the result of my stay with Kabréga. Few travellers have as yet seen Unyóro, which circumstance may lend to these notes a special value. It also struck me, while perusing Baker's books, that they contained very little information with regard to land and people, habits and customs. I therefore set myself the task of collecting all that I could learn upon these subjects, in which endeavour my knowledge of the language was an essential help.

We left Mrūli on December 13, 1877. The road, as far as Kisúga, was already well known to us, and led through a slightly hilly country, gently sloping away from the river towards Khor Kāfu, into which it drains, and abounding in the thorny *Acacia fistula*. The ascent towards the west is very gradual indeed, and it is only made apparent by the denudation of all the higher parts, which has laid bare the red clayey subsoil, whilst the hollows are filled up with the grey fine-grained loamy detritus which is so characteristic of this country. Aloes abound. A circular basin, cut, as it were, in the red ground and filled with clear water, provided a welcome resting-place for my porters, who, after a short repose, continued the journey, and, two hours later, stopped for their

midday rest under a group of trees, and near little pools of water. A bush with shining dark green camellia-like leaves and white blossoms, resembling a passion-flower, the stamens of which were of a yellowish white colour, and the pistils red and yellow, was quite new to me. The red berries are eaten by children.

My companion, Kapémpe, a Matóngali of Kabréga's, entertained me by mimicking in a most amusing way the gestures of the porters who found their burdens too heavy. These people express astonishment in a way quite new to me—a rapid raising of the closed fists to the crown of the head, from which they are drawn energetically to the forehead. The rumbling of thunder in the distance and dark clouds overhead warned us to start, but we were hardly on our way, when the rain poured down in torrents. Every moment a porter would stop to cover himself with a banana-leaf, or to take off the ox-hide which serves him for a dress, in order to protect it from the rain, which renders it hard. In this way the whole column was brought to a standstill—a very pleasant episode in such rain as this, which poured in at one's collar and out at one's boots! Then, in great haste, we again started forward, through bananas and whorled eriodendrons, till, after a march of 7½ hours, we reached Kisúga, where we were obliged to rest the next day to dry our baggage.

When at last we were ready to start, one of the soldiers who accompanied me was taken ill, I expect, from fear of the dangers he apprehended on the journey. I had therefore but one soldier left to take charge of my horse, and my two servants, boys between ten and twelve years of age—an imposing escort! Being put on my guard by Baker's account of Kabréga's talent for begging, I left everything that was not absolutely indispensable, even my gun, in Kisúga; and then we started in the direction of Londú, along the road we had previously trodden, through tall grass and numerous banana groves, in which reddish-yellow passion-flowers threw their tendrils across our path. The porters marched in total silence, a contrast to the noisy Wagánda; no drum was carried with us. Our halts became frequent, and the porters seemed to be very hungry, as on every possible

opportunity they picked up some bananas or a sweet potato. Towards midday we reached our former station, Londú, the defenceless stockade of which, with many a spot charred black by fire, produced a very painful impression. The *zeríba* had not been occupied by the Negroes, as a sort of superstitious fear prevents them from dwelling in houses previously occupied by us. Small herds of bullocks and goats and a few solitary inhabitants were visible in the vicinity.

After having settled ourselves for the night as best we could, we sent to the chief of the district, who lived near, to request porters for the morrow, as Kabréga had promised them. I should have preferred my own porters from Mrūli, as I could then have been more independent in my movements; but Riónga's people absolutely refused to follow me into the land of their deadly enemy, and thus I had to rely upon Kabréga's people. Biábo, the Matóngali who had charge of this place, a corpulent young man with slightly prognathous features, paid me a visit in company with five or six of his men. They were reddish-brown in colour, except one who was deep black—a man from the district of Shifalú, which lies near the rapids of Táda. The colour of the people throughout this country is very various, and graduates from black to yellow; yet, for the most part, the fundamental colour is red. The people are clothed in soft ox-hides, from which the hair has been removed, except at the borders, where a strip of hair of two fingers'-breadth has been left as an ornament; their costume is completed by arm-rings and anklets made of brass and necklets composed of roots. The head is not shaved—shaving is a sign of mourning—indeed you often see very elegant cork-screw-like curls. A small present of beads procured me in return several baskets full of sweet potatoes, and as I had brought a bullock with me from Kisúga and presented it to my porters, song and revelry lasted far into the night.

During the night rain began to fall gently, and early on the 16th it poured down in torrents; but in spite of that, the promised porters arrived, and I prepared for the journey. Considering, however, that the baggage would get an unavoidable soaking, and that the troublesome and useless tent we had

dragged with us required, when wet, five men to carry it, I determined to wait; and I did well, for at two o'clock it still rained as persistently as ever, so our further march was put off until the following morning. My porters, who last night devoured an ox, were now lying hungrily around a smoking fire; and I too had only what was absolutely necessary.

Next morning a very cloudy sky did not promise well for our further journey; nevertheless we broke up camp in good time (6.15 A.M.) in order to reach our distant quarters at the appointed hour. A very hilly country spread itself out before us; both sides of the way were flanked with solitary hills, and our progress was rendered irksome by antediluvian grass and bushes often ten feet high. *Entada sudanica*, with its ripe fruit, was frequently to be seen along the road. In swampy places there were groups and bushes of *Phœnix spinosa*. Magnificent growths of papyrus fringed the watercourses. This day, too, we did not escape the rain; and as only grass and forest lay before us, and neither huts nor plantations were to be seen, we were compelled to press vigorously forwards, until, about two o'clock in the afternoon, we reached a small group of miserable huts, where we were obliged to remain for the night. The inhabitants had fled at our approach, but we found fires still burning in the huts. Matóngali Vukímba, the chief of the village, did not keep us long waiting, for we had hardly placed our things under cover when he, accompanied by two subchiefs and several of his people, put in an appearance, to pay his respects to me and to present me with a goat and two sheep—quite a luxury. The people impressed me favourably; they were modest and unpretentious, and satisfied with anything that was given them. If they were allowed to choose between glass beads and cloth, they preferred the latter. This place was called Kimánya.

The Wanyóro appear to be very much afraid of dew and rain; at any rate they will never get up early in the morning; and if, when on the march, they come upon grass wet with dew, they lay down their loads and quickly tie before them either a large banana-leaf or a bunch of dry leaves in order to protect themselves. A woman who was travelling with us was

so completely covered with dead leaves that she looked exactly like a wandering withered bush.

On the 18th inst. we started very early, but after ten minutes' march we came to a halt near an extensive plantation of bananas and sweet potatoes, in order to change our porters. Matóngali Vukímba had the best intentions; but much palaver and some blows were required before he was able to convince the people that they must go on; and when, after a quarter of an hour's halt, we were again on the move, he followed us, with one of his subchiefs, gesticulating and shouting in such an energetic manner that I expected every minute a fight would ensue. At last, however, the dispute was settled, as usual by a friendly "Kurúngi" (good), and soon after Vukímba turned back to his village.

We then proceeded upon our way, stopping, however, at every group of huts to try and press porters into our service. The road led at first through fine fields and banana groves, then up and down through high wild grass. On either hand, at a distance of two or three miles, there rose mountain groups forming distinct ranges. Magnificent "gallery" woods skirted two muddy rain-gutters, which we crossed.

The silvery-haired *Colobus Guereza* was seen among the tops of gigantic trees which were enveloped in climbing plants. The *Cercopithecus grisco-viridis* swung among the creepers, and phœnix bushes, with Calladias, Amomum, and Rubiaceæ, formed the underwood. In the hollows where the rain collects there was very little water; it reaches nearly to our waists; but the mud and imbedded roots made our progress difficult. The horse I had with me was perfectly useless; I managed far better on foot.

A short march brought us to another stream with magnificent "gallery" woods. The red tulip-like flowers of the Spathodia shone against the thick dark foliage like flames of fire. We now left the high grass and marched upon a road which had been formed by pulling up the grass and cutting down the trees. Unfortunately, however, marching was rendered very difficult by the existence of deep holes where roots had been pulled up. For some distance a *khor* flowed by us at our right hand, its course being marked by dense foliage of overhanging

shrubs. We then once more arrived at clearings, where bananas, sweet potatoes, and lubias intermingled, and here and there the green stalks of maize were seen, or the broad leaves of Virginian tobacco. Compounds containing three or four huts lay scattered throughout the cultivated land. They were hemispherical, and their grass roofs stretched down to the ground all round, except where a porch was formed over the door. The frames were made of light reed wickerwork and supported by numerous poles. Inside, the huts were not exactly inviting; they were divided into two compartments, the floors of which were covered with hay, and infested by innumerable mice, cockroaches, crickets, and fleas. Household utensils were not numerous, for the inhabitants had fled before us, taking all their treasures with them.

We halted at Kitóngali, in one of these clearings, where I was fortunate enough to obtain three huts for myself, my people, and my belongings. Here I had the pleasure of a visit from the village chief, a good-looking young man, whose father is Kabréga's confidant. He made quite an imposing figure, being clad in thin white skins, over which a reddish-brown *mbúgu* hung like a toga; his servant bore after him a double-barrelled sporting-gun. The usual presents having been exchanged, he sent a messenger to Kabréga to apprise him of my approach, for the next day we expected to reach our destination. If, however, I understand African ceremonials rightly, many a day will still pass before I reach Kabréga's, although we are quite near to his residence. It is always uncomfortable to travel during the rainy season, because you are never master of the situation, which, indeed, leaving the rain out of question, is rarely the case. From midnight the thunder rolled on all sides, thick fog enveloped the country, and it rained as if it were absolutely necessary for the clouds to rid themselves of their whole contents that day. Of course, it was no good thinking of further progress in such weather; and to make matters worse, my hut was not water-tight. I had seen none of my people that day, for, on account of the rain, and possibly also of hunger—for meat does not satisfy them, and corn could not be obtained—they were having a long sleep.

Notwithstanding my orders that if the sun came out I intended to march forward, no preparations were made for a start. My people informed me flatly that the grass was too wet and the sun too hot, and that therefore I must wait until the next morning. A beautifully coloured woodpecker hammered upon a tree-trunk, which process he accompanied by an angry twittering, as if he were indignant at his tiresome work. *Trachyphonus margaritatus* called to his little mate, and *Psittacus erythacus* flew about in pairs, or at most in threes. In the evening we heard the almost deafening chirping of a huge brown grasshopper. The creature is three inches long; it had been attracted by the light, and hopped about the hut. I discovered upon some tall fig-trees, which had suffered much from the ravages of an elephant-beetle, a parasitic lichen, apparently very much like Schweinfurth's *Platycerium elephantotis*. Its squarish leaves, measuring about fourteen inches, were dark green, fleshy, and profusely veined; the surface had a few woolly hairs; the under side was covered thickly with brownish wool. Each leaf had one side cut straight, the other sides being convex. The leaves hung like gigantic ear-lobes upon the trunk of the tree which nourished the plant.

All the trees were literally covered with the nests of astrilda, in which I found both eggs and young. A lower nest contained the mother (at night) and her eggs. Above this there was a small nest for the father. I met with representatives of *Sporothlastes fasciatus*, *Spermestes cucullatus*, *Ortygospiza atricollis*, and several Habropyga. I did not see such large Lagonosticta as those in Ugánda, and only a few scattered specimens of *Urœginthus phœnicotis*.

The chimpanzee is not uncommon in the southern districts of Unyóro. It inhabits the woods as far north as Kiróto and Masíndi, whereas in Ugánda it remains much farther to the south, and, so far as I know, it is not seen farther north than Uddu. It is called it Unyóro *kinyabántu* (manlike), and in Ugánda *mazíki*. This, in connexion with Schweinfurth's reports from the Nyam-Nyam districts, shows that its northern boundary is dependent upon the nature of the vegetation. People here say that it has nests in the trees, and as it chooses the highest trees to build in, it is very difficult to

catch. It appears that this ape is found much more frequently in the Monbuttu and Nyam-Nyam districts than here, probably because the thicker woods in those countries afford it greater safety. In 1877–78 four living specimens were sent from there to Khartum, where they died, and were not made use of in a scientific or any other way.

The distribution of the parrot (*Psittacus erythacus*) coincides with that of the anthropoid ape. The bird is to be seen all over Unyóro flying about in twos and threes. It is a high, heavy flier, screams continuously during its flight, and is one of the earliest birds. Even before sunrise it is heard screeching; towards midday, however, it vanishes, in order to take its midday rest, and is seen again from four o'clock until the evening. The numerous sycamores provide it with necessary food. Possibly, also, it feeds on bananas; at least some of the specimens I obtained ate this food readily, and preferred it to sugar-cane. The bird is very common in Ugánda, and is sometimes kept in the huts, where, without any instruction, it soon learns to speak. In Usóga, where the bird is exceedingly numerous, it is caught in small nets, and the red feathers from its tail are plucked out and used as ornaments. Care is, however, taken that the person performing this operation is unknown to the bird. The feathers are reproduced very slowly. The northern boundary of the distribution of this bird, as well as that of the ape, appears to extend to the second degree of N. lat. *Colobus Guereza*, which is very common here, exists farther to the north, and I have obtained its skins from the district of Fatiko (3° 1′ N. lat.); in Lúri, too, the ape is very common. *Cercopithecus griseo-viridis* and *C. ruber*, as also a third grey species, together with *Palæornis cubicularis*, are to be found everywhere, but they become scarcer as we approach the equator. Baboons of several species are common in the mountains. I have been told two or three times that black parrots are to be found; but as the existence here of the *Psittacus Timneh* has not been proved, it is probably a dark specimen of *P. erythacus* that has been seen. Still, it is perfectly true that many new discoveries remain to be made here.

At midnight the horns were blown—the drum serves only as a war signal—to assemble the porters; yet at six in the morning

not ten persons had turned up; and when, after half an hour's bargaining and palaver, a few more Negroes appeared, no one seemed to know the road, although Kabréga's capital could not have been more than five or six hours distant. I was therefore compelled to send two men to Kabréga to beg him to send me a guide, knowing all the while that this ignorance was a mere pretence. Fortunately I had been able to procure a sheep and a few fowls, as well as some sesame (*Sesamum orientale*) for my people in exchange for a few beads, so that they at least did not starve. There were several heavy storms of rain again that day.

At last, on the 21st, we started. The horns had been blowing for hours, and my people had urged me to march. As, however, I had heard the beating of a big drum for about half an hour, I concluded that Kabréga was sending one of his chiefs to meet me; and so it turned out, for soon after, Makángo (big chief) Bkámba appeared, accompanied by a drummer, a gun-boy, and some five or six other people, to greet me and to escort me at once to Kabréga. Everything was now arranged like magic, and off we marched, our luggage in advance. We climbed up through well-cultivated land, in which were many huts; then, turning round by a large banana grove, we descended to a big papyrus swamp, the crossing of which, although it was only about two hundred yards broad, occupied a whole half-hour, because the water between each single thicket reached up to our necks and the roots caught our feet like nooses. Only one who has experienced such a passage can form an idea of its unpleasantness, especially when stinging and prickly vossia-grass abounds.

When we at length found ourselves safely on the opposite bank, the porters, who were most wonderfully willing, went on before, and we passed through dense masses of grass with many mimosas, which occasionally gave place to meadow-land, until we entered a sort of defile between two ranges of mountains, and marched on, up and down hill. One of these hills was decorated by a solitary beautiful dracæna. In a banana grove, where fig-trees and phœnix palms were growing, we saw the fresh spoors of two large hyenas. The last part of the road led along the mountain-side to the left, Khor

Kyái keeping to our right, till at length we left the mountainous defile, entering again into high grass and reeds, and pausing at last to rest by a small brook with clear bubbling water, which flowed over mica slabs and tasted strongly of iron. Grey cows, possessing neither horns nor humps, stood in the water (they destroy the horns of the cattle here as soon as they commence to grow, by cauterising them with a red-hot iron, in order to enable them to pass with greater ease through the tall grass and the jungle). All the houses lay at a distance from the road. Probably in order to impress the stranger with the immense size of the land, and therefore with the greatness of its ruler, he is led round about for days through the high grass, when the direct route would hardly occupy three marching hours. The country is said to be well peopled.

Soon after crossing the small *khor*, we found ourselves again between rows of mountains, several summits of which may attain an altitude of from 1500 to 2000 feet above the general elevation of the country, which is probably as much as 4000 feet. Then followed cultivated fields, with many miniature votive huts, erected with the idea of obtaining a good harvest. Giant reeds came next, and at last the mountains opened out, and before us lay Mpára-Nyamóga, Kabréga's headquarters, Unyóro's capital. The huts which had been prepared for me lay to the left of the road, upon a hill, above which high mountains towered. The spot is about ten minutes distant from the great compound of huts which comprises the king's residence, and which, with another compound lying near it, forms the village. Our goods were hardly under shelter when the rain began to pour and the thunder to roll. Late in the evening Katágrua, Kabréga's prime minister, once a companion of Baker's, came to visit me and to bring me his master's greetings. Kabréga had intended to receive me immediately, but was prevented doing so on account of the rain. For the same reason it had been impossible for him to gather together for me any kind of present, and therefore he begged me to excuse it. I simply remarked that I was very much obliged to his sovereign, but that I was not come in order to receive presents. Makángo Bkámba, whom I had sent with my greetings to the king, brought me the promise of an audience to-morrow.

The sun had hardly risen when Katágrua arrived, bringing with him the present he had yesterday led me to expect. Two fat white oxen with long horns, a package of fine white salt (from the Albert Lake), three packages of Telabún corn (*Eleusine coracana*), and two packages of meal of the same kind of corn were laid before me, together with several jars of very good banana wine, accompanied by Kabréga's best greetings. After Katágrua had gone, I had hardly time, before my audience with Kabréga, to prepare the presents which I had brought for him, and which far surpassed anything that he could previously have received. Exactly at midday my guide, Kapémpe, appeared, this time dressed in a *kuftān* and *tarbūsh* (presents from me), and our procession started. It was headed by three Matóngalis; then followed my guide, Kapémpe, with all his people; then two porters carrying the presents for Kabréga; and I, in uniform, on horseback, attended by my soldier, brought up the rear.

The road led for ten minutes towards the north-west, downhill across Khor Kyáï, which was full of papyrus and amomum, and over which a bridge had been thrown in my honour. Then again uphill, past two small compounds, in the shadow of which stood crowds of staring people. We crossed an open square, leaving to our right the king's cattle *zeríba*, in which were numerous houses for the Wahúma herdsmen. A circular *togul* rose before us, with lofty entrances in front and at the back, the space before which was roofed in. The floor of the *togul* was clean and strewn with green papyrus-leaves; in the middle of it sat Kabréga upon a high stool, surrounded by his office-bearers, crouching upon the floor; behind the king stood about ten men and boys, armed with guns. At his feet crouched Manyára, the interpreter, a man with a bird-like face. My stool was placed close to that occupied by the king, and we surveyed each other intently for several moments.

This, then, was Kabréga, the cowardly, treacherous, beggarly drunkard described by Baker. The graceful folds of a piece of fine salmon-coloured bark cloth covered his body up to the breast, above which it was perfectly bare, except the left shoulder, over which was thrown, like a plaid, a piece of darker-coloured bark cloth. Two burnt scars were visible on the temples of his

well-formed, smoothly shorn head, these constituting the tribal mark of the Wanyóro; his four lower incisor teeth were wanting, as is the case in all Wanyóro, and the upper incisors projected slightly, and were brilliantly white. (The lower incisors, sometimes also the canines, are always removed from girls and boys as soon as they arrive at puberty. They are forced out with a broad piece of iron used as a lever.) A necklace of hairs from a giraffe's tail, upon the middle of which was strung a single blue glass bead, encircled his neck. A root amulet and an iron bracelet were the only ornaments on his strong muscular arm; his hands were small and well kept. He is strikingly fair, probably in consequence of his pure Wahúma blood. He made, upon the whole, a very favourable impression upon me, but there was a decided voluptuous expression on his face. His attendants, about fifty in number, were clothed in skins and bark cloths, and amongst them was his brother, an ugly black fellow.

After presenting him with my credentials, to which I added a few words, a very lively conversation sprang up between us. Kabréga speaks the Sudān Arabic fluently. He requested me, however, although I speak Kinyóro, to talk with him in Arabic, and to permit my words to be translated by his interpreter, "so that his people could understand them." I next gave him the presents I had brought with me, and much enjoyed his pleasure in receiving them. He paid especial attention to a few pieces of scented soap. My soldier had a small revolver in his girdle; Kabréga requested permission to view it, and comprehended at once its mechanism. He took it to pieces, put it together again, and then gave it back to me. He then asked me to inform him how I had enjoyed myself last year in Ugánda, and what I had seen there, and he was highly amused with my description of the court ceremonials which obtain in that country. Threatening rain brought our conference to an end before either of us wished its conclusion. He promised, however, that he would soon call me again into his presence, and then took leave of me in a thoroughly dignified manner.

I have often visited Kabréga subsequently, and cannot say that I ever heard him speak an improper word or make an indecent gesture, or that he was ever rude, excepting, perhaps,

that he sometimes spat on the ground before him, one of his chiefs immediately wiping up the saliva with his hand from the grass mat. Might not a like official find employment at European courts? Kabréga is cheerful, laughs readily and much, talks a great deal, and does not appear to care to be bound by ceremony—the exact opposite to Mtésa, the conceited ruler of Ugánda.

The next day I was again called to the king, whom I found surrounded by ten or twelve persons. Any one who has seen the strict etiquette in Ugánda could not help being greatly surprised at the nonchalance and informality of the Wanyóro, who lie about the floor chewing coffee in the king's presence in a perfectly unceremonious manner. We had a very long interview, concerning which I would specially note the willingness with which His Majesty acceded to my requests, and also his account of what took place here during Baker's residence. Kabréga very readily consented to my proposition that some of his people should go with me, or rather be sent, to Khartum, to pay a visit to the Governor-General, Gordon Pasha. My watch caused much astonishment, and I was requested to send him a loud-ticking watch after my return home. I certainly cannot charge Kabréga with begging; on the contrary, he sent me daily, in the most hospitable manner, stores of corn, meal, *mwénge*, &c., which, although they were only intended to supply the wants of one day, could easily have been made to last us for a fortnight.

During my repeated visits Kabréga gave me the impression of being a thoroughly hospitable and intelligent man. Quite apart from the rich gifts of food, *mwénge*, bark cloths, &c.—a return for which it was impossible for me to make—he proved this in a very noteworthy manner in connexion with an incident which might have brought me into a very awkward position. Notwithstanding my strict orders that no hostile action should be taken against Kabréga by the Egyptians during my visit to Unyóro, the soldiers in our nearest station, led by stupid, jealous officers, made a raid upon the country, and killed several of Kabréga's people. Katágrua was sent by the king to give me this information, and to assure me at the same time that, although this occurrence was highly

displeasing to him, it should in no way affect our personal relations!

In a long and very interesting visit which I paid to Kabréga on the 5th of October, I received a detailed account of all the events that happened during Baker's visit, a curiously different account from that given in "Ismailïa." The conversation turned upon a hundred various topics. As the sky was again overclouded, I withdrew after four hours' chat, and had hardly time to reach home before the storm broke over us. Although I suffered considerably during my fourteen days residence here on account of the torrents of rain which fell three or four times daily—which state of things, according to the report of the inhabitants, will last till November—I have never in all my life experienced such an uproar as this storm. A deep darkness enveloped the land, now and then streaked by blue lightning, and, whipped by the raging south-east wind, hail and rain came beating down, the hailstones being as large as horse-beans. After continuing for half an hour, the hail gave place to a true deluge of rain, and until late in the night it still continued raining steadily. During the hailstorm (5.45 P.M.) the thermometer registered 64.4° Fahr.; the aneroid 25.65 in. At seven o'clock in the evening the thermometer stood at 66.2° Fahr.; the aneroid at 25.70 in. All our huts were full of water, and the next two days were occupied in repairing them.

I received visits daily from Kabréga's chiefs, amongst whom Katágrua and Melindua were two really pleasant, sensible men. As regards the former, I have pleasure in being able to confirm what Baker said of him, namely, that he was the only gentleman at Kabréga's court; not once did he request a single thing from me, and he received with signs of the greatest gratitude the little presents I was able to make him. I am indebted to both these men for much valuable information concerning the life and customs of Unyóro.

On the 30th of September I was just preparing to utilise a pause in the rain by taking a walk, when I was called to Kabréga, whom I found sitting on his divan enveloped in a bark-cloth of beautiful pattern. People from Karágwa had arrived, bringing with them arms and ammunition, to be exchanged for ivory and slaves, and Kabréga wished to show his white guest

to them. I had taken with me Speke's book, in order to astonish the king; and as I showed him his father, Kamrasi, in it, as well as other pictures, especially the one of the famous dwarf Kimenya, who died several years ago, the pleasure of those present knew no bounds. Two small men, but certainly not dwarfs, were immediately led before me, one of whom, a regular hump-back, formed a subject for the company's hilarity. Hump-backed people, it appears, are not uncommon here; they are called *oïbango*. The conversation turned to the subject of white and coloured people; and in order to prove that light-coloured persons also exist here, a lanky young man was introduced to me, who was distinguished by the yellow ground-colour of his skin. He was offered to me as a present, but was declined with thanks. The production of white children (albinos) by black parents is certainly not uncommon, but there is no question of their having anything to do with the marriage between blood relations, notwithstanding Linant de Bellefond's assertion that Mtésa believed this to be the cause. The latter probably heard such an opinion from Europeans. In this country brothers marry their sisters without producing albinos. Albinos are supposed to bring with them misfortune, and are therefore not considered to be of equal birth with their brothers and sisters. I had an opportunity subsequently in Ugánda of examining carefully an albino girl. I shall therefore refer to this subject again. The presence of white people in Ugánda is denied there, but still Albinos are found there; and I could only hear of one white man who had tried to go to Ruhánda, but had not succeeded—probably Stanley.

As on the 8th of October Kabréga again sent me supplies. I called to thank him, and was taken to his private house, where I, for the first time, found him clothed in Arab dress, and I chatted with him in Arabic. The fat women whom I saw on this occasion came up in all points to the description of Speke and Grant, those reliable and conscientious travellers, who saw similar fat women in Karágwa. Such a custom as this of fattening up the king's wives says more than all else for the original unity of these countries, or at least goes to prove the same origin of the rulers; the ruler of Ugánda

is, notwithstanding his "pedigree," only an usurper and parvenu.

One day I took a walk along a path towards the south, which led me along the foot of mountains of considerable height lying to the left, whilst those on the right were about two miles away. At the bottom of the valley Khor Kyáï flows at first towards the south and then to the west. High grass interwoven with creepers abounds. A large ocymum mingles its odours with that of several Cruciferæ (?). Here, as in so many places, there are open woods of fig-trees and mimosas, as well as Combreteæ, and conspicuous among them is a lofty tree with beautiful yellow sweet-smelling flowers and a foliage resembling that of a mongolia. Taking it all in all, the vegetation in North Unyóro is rather monotonous, with the exception of those places where runnels of water produce, as if by magic, small floral Edens. This, notwithstanding the opposite opinion of Baker, is probably due to the fact that the soil in Unyóro, at least in its northern part, is not so rich as that in Ugánda. On the other hand, it must be remembered that the custom of annually burning the grass does not give the vegetation a fair chance of developing. What trunks exist are distorted and knotty. Only on the mountain slopes, to which the fire seldom reaches, and along the *khors* do we find splendid pillar-like trunks. I have already, in former letters, called attention to the beauty of such oases of vegetation.

After I had wandered for an hour, I found that the mountains to the right suddenly turned towards the west and opened up an extensive view across a rolling prairie, beyond which, in the far south, the rounded outlines of isolated mountains rose into view. Behind me and on either hand, the view was shut out by high mountains. I could only see the dark green line of the *khor* winding its way between the greyish-red grass. In every fold of the ground the presence of inhabitants is indicated by columns of smoke. Threatening rain-clouds warned me to return home quickly, but they were soon driven away by a fresh east wind. The rainstorms here always occur with south or south-east winds. There was abundance of rain during the whole of my stay in Unyóro. I never experienced a day without rain, and it often rained three or four times in

the course of twenty-four hours. The curious phenomenon of partial rains occurs sometimes; for instance, it poured in torrents at Kabréga's house, while my dwelling entirely escaped, although situated at hardly ten minutes' distance. The highest temperature recorded by me (79.7° Fahr.) occurred on the 20th of October.

On one occasion I observed a very beautiful after-glow. The clear flashing beams of light, varying in intensity at intervals, and having their bases situated on the western horizon, stretched like an arch towards the zenith, flashing up only to die away continually. After perfect darkness had set in, this sheen continued, until at length, about three-quarters of an hour after sunset, it finally faded away. The sky was lightly clouded in the west, but, notwithstanding this, the beams of light were quite resplendent. This after-glow is said to occur here very frequently.

As soon as the new moon becomes visible she is greeted by the firing of guns. Horns and flutes form a lively, if not very harmonious, concert, the musicians marching up and down, either upon their heels or only upon their toes, bending at the same time their bodies backwards and forwards. Kabréga himself is at this time occupied in preparing his magic powders, his amulets and talismans, and no doubt also dabbles a little in the art of divination, as is the custom with all Wahúma chiefs during the first few days of the new moon.

Early on the 9th of October, in celebration of the feast of Ramadān-Bairam (Id ezzuraiyar), Kabréga sent me a present of an ox. As, for a wonder, the weather permitted me to get about, I climbed the towering mountain which was near our camp. A footpath, well worn by the herds, leads up to the highest peak, the base of which is hidden by grass and reeds and many mimosas. The soil here consists of reddish grey vegetable mould, under which there is a layer of brown humus two feet thick, having underneath it sharp-edged quartz fragments. The ascent from here is very difficult, in many places hardly possible except by crawling. So steep indeed, is the side of the mountain that only here and there a tree with willow-like leaves is able to take root. Short turf covers the thin layer of earth, which is bedded upon granite, except in some

places where one finds quartz in small pieces. The higher one climbs, the scantier becomes the vegetation, until upon the summit itself, which I reached after three-quarters of an hour's climb, there are only four or five stunted trees amidst blocks of rock and the grey mushroom-like structures of termites. The readings of the aneroid and thermometer (October 9, 1877) were as follows:—8h. 00m. A.M., camp, 25.79 in., 68.9° Fahr.; 8h. 49m. A.M., summit, 25.26 in., 104° Fahr. (The thermometer was not properly shaded from the sun.) This gives the height of the mountain, roughly calculated and without any corrections, as 4500 feet, which agrees fairly with the altitudes previously observed in Unyóro by Speke and Baker.

The country spread out before me was a highland sloping to the south, and more gently to the west, upon which rise isolated dome-shaped hills and even short ridges. It looks as if a continuous plateau had existed there in a past age, from which enormous floods had washed away the softer rocks, thus giving rise to the existing hills. The parallel arrangement of these hills on either side of the road, aids one's fancy in tracing the ancient beds along which the denuding waters took their course, and of which the existing *khors* are but feeble phantoms. One single table mountain is visible from here, but unfortunately I was not able to ascend it. Moreover, the mountains to the west of the lake, which are not visible owing to intervening heights, are far higher than the one I climbed, and Jebel Mezeja Mkúru ("the Great Lord") is also much higher. There is said to be a plateau upon it to which the inhabitants retire when they are attacked. I was also told of an unfathomable circular lake and of remarkable caverns far away to the south-east. I may add that, with respect to its geological structure, I have never seen so monotonous a country as Unyóro.

Two Zanzibar merchants arrived here from Karágwa without touching Ugánda; both were freed slaves who wished to buy ivory by order of their masters; it is abundant and pretty cheap. They offered in exchange cloth, guns, powder, percussion-caps, copper, brass, &c. Near midday, on the 10th of October, a company of Wagánda also arrived in order to trade. Their chief, Mbázi, an old acquaintance of mine, sought

me out at once, and informed me that Mtésa had sent people to Mrūli to fetch me from that place. Letters which I received on the following day from Mrūli confirmed the arrival of one hundred and fifty Wagánda, but as I was not there they returned to Ugánda. At the same time I received English and Arabic letters from Mtésa inviting me to come, but "to bring no soldiers with me." I was told, too, that some of my things, which I intended to present to Kabréga, had been forwarded, but they had been taken from the porters at Khor Kyáï by Kabréga's people. I, of course, claimed them back at once, upon which Kabréga sent me word that I need not trouble about them, for he himself was the aggrieved party, and would immediately take steps for their recovery.

Two days after, the messengers whom Kabréga had sent to find them, returned and laid the unopened bundle at my feet. According to their account, all the inhabitants of the village had fled and deposited the goods in the house of a neighbouring chief, who had delivered them up to them. I sent at once to Kabréga to thank him, and at the same time to request an audience, when I intended to ask for permission to depart. At this audience, which took place on the 15th, my official business was brought to an end to our mutual satisfaction, and I cannot refrain from again recording the friendly treatment extended to me by Kabréga, which was never disturbed by a single unfriendly word, even up to the last moment, so that I shall always remember with pleasure the days I spent here. His embassy to Gordon Pasha, composed of Kasábe, Baker's former guide, who had already been in Gondokóro, and the interpreter, Msíge, were either to accompany or to follow me. As a parting gift, I presented Kabréga with a richly gilded sabre, which very much delighted him. I could therefore anticipate being able to start upon my return journey in a week, if no unforeseen delays occurred. Kabréga gave me his "dead" watch for me to get repaired in Khartum. He also requested me to send him an Arab clerk.

To judge by the sounds of the Ugánda drums, the Wagánda were really received at court on the 19th of October, after waiting nine days. This seemed to be the day for paying tribute; at least the quantity of packets and bales lying before

Kabréga's divan, as well as piles of new bark cloth, and the number of people who had collected together, proved that a great reception was taking place. The king sent some loads of meal for our journey. Several days later I received, in addition to this, six oxen; they were the usual hornless kind, having small humps.

On the 22d of October I was again called to Kabréga. He was carrying on a lively conversation with a number of people, amongst whom I noticed the Wagánda; but when I arrived, the whole party was dismissed, and I was, in the first place, requested to show him my revolver. After he had examined it, he asked me to send him some like it. A very animated conversation followed upon the most varied subjects, and was prolonged until near evening, when pouring rain commenced, and compelled me to return home. My real business here was at an end. It was almost impossible to collect anything, for all specimens, bird-skins, &c., were spoilt on account of the indescribable humidity. I was therefore ready to march. I had my farewell audience the next day, and can state, with satisfaction, that the wish on both sides to meet again was very cordial. The people who were to go to Khartum were still away setting their houses in order; the king informed me that they would overtake me at Mrūli.

The porters who had been promised me for the next day, of course, did not appear, although Msíge, who was to accompany me, was early on the spot.

To my great surprise, I received letters from Magúngo containing very curious reports concerning the doings of Nur Bey, the acting Governor of the equatorial provinces—a worthless, mendacious sneak. In consequence of this I almost decided to go to Magúngo, but soon gave up the idea, for, on account of the constant rain, the distance would have been too great for my people. Having received two big elephant's tusks as a parting gift from Kabréga, we began the return march on the 25th of October, by the same road which had brought us here. A volley of guns was fired from Kabréga's headquarters in honour of the parting guest. Owing to the persistent rain, all the grasses had shot up higher, the reed thickets had grown more impenetrable, and thorns more troublesome. At

the same time the water was often knee-deep in the holes and puddles. After we had passed Khor Kabrogéta, the water of which is so strongly impregnated with iron that it is said to distend the intestines, we marched a little farther, and then suddenly turned to the right into a much-neglected banana grove, where it was suggested that we should pass the night. The people scattered immediately; but when I looked round for shelter I only found one broken-down, abominably filthy hut; so I insisted on a further march, and although an hour passed before I got the people together, we left this inhospitable Kikínda, continued our difficult march through water and bush for more than an hour and a half, and finally occupied at sunset some huts in the village of Blíndi. In one of the huts here a wooden triangle was hanging, to which were suspended a large number of small gourds filled with pebbles; this was a rattle to accompany the dance.

No rain fell during the night, but in the early morning all the sky was grizzly grey, in spite of which we set out, keeping, with few deviations, to the road along which we marched on our journey to Kabréga's. The winding Khor Kyáï, although now roaring and full of water, was twice forded without difficulty; but the great papyrus swamp which followed gave us a good deal of trouble on account of its entangled roots. I secured a fine specimen of *Scopus umbretta*. We had hardly crossed the swamp, when the rain, till now bearable, beat down with such violence that we rushed forward at great speed for about half an hour, when we reached Kitóngali, somewhat below the place where we had previously passed the night.

We sheltered in some huts, dried ourselves by a blazing fire, and could not think of continuing our journey until midday. An unpleasant incident happened to me here, for I discovered that, unluckily, I had lost my note-book during the rain, and in spite of an energetic search I was not able to find it; but after the rain was over, a woman returned it to me uninjured. Another occurrence took place shortly before starting. Msíge wanted to take a jar full of lubias from a woman, but she, taking the joke ill, struck him over the head with the jar, and wounded him badly. A fearful disturbance arose, and at first they wanted to kill the woman; but finally,

after my energetic protestations, were satisfied with carrying off a young ox, as well as bark cloths and skins, from her hut. The district here belongs to my acquaintance Melímbua, who was not likely to approve of this summary kind of justice. Msíge's head was bandaged as well as possible, and then we resumed our march. After wading through much mud and water we got back to the old road, and reached Kimánya late in the afternoon. The huts we had previously occupied had been burnt down by the inhabitants, because I, a white man, had slept in them. Yet I received a friendly welcome from Vakúmba, and was even able to procure a goat. We also obtained, by barter, a beautiful skin of the *Tragelaphus scriptus*, which is very common in Unyóro.

Kabréga had sent Matóngali Matébere to look after my porters and my comfort, but he took little trouble about these matters. It was already nine o'clock on the 27th of October, and not a single porter was to be seen. I therefore sent to him, but received neither answer nor porters. So I gave the order to start, and left him behind with all my traps, for which I held him responsible to his master; he promised to follow me soon. Passing by a magnificent sycamore, the hanging roots of which had grown into nine stems, we went on up and down hill, through tall grass, till we rested a while beside a pool that had been made for watering Kabréga's cattle.

I noticed quite near to the water a solitary *Euphorbia venefica*, a plant which is quite a stranger in this country. This continual struggle with thorns and grasses had thoroughly tired us out, so we were very thankful soon after to reach a few miserable huts, where we could take shelter from the torrents of rain which began to pour down upon us. Only the most useless of my loads had yet arrived, while my bedding and cooking apparatus remained behind, so I was obliged to go to bed supperless, while the leaky hut, with its mosquitoes, and water pouring in on all sides, proved no paradise, and I preferred sleeping on a bullock's hide in the open air. But in the morning it grew desperately cold, and when the sun rose we were all ready to start at once, although our things were only arriving in driblets. This place was called Btóbe,

and was inhabited by only one family, consisting of one man, eight women, two children, and a dog.

A short journey through tall grass brought us to Londú, which we left a little to one side, to halt half an hour's march beyond it, in Kijivéka, where some good huts were at once placed at our disposal, and where we were given some sweet potatoes, which we relished much after our thirty-six hours' fast. The Madundí, who inhabit this district, are of a very dark colour, and speak a language quite different from that of the Wanyóro. It strikes one particularly by its humming tones and jerky syllabification. These people are said to have originally come from beyond the Albert Lake, and they still practise circumcision. Their houses differ from the hemispherical "bee-hives" of Unyóro, in the construction of their reed walls and high porches. Some of the children are swag-bellied, a result of irregular nourishment—to-day a great deal, to-morrow nothing. The women wear the pretty striped aprons of bark cloth noticed by Baker. All smoke pipes with enormously long reed stems.

A clear sky promised a fine day, and our station of Kisúga lay quite near, where we could hope to rest. Matébere appeared just before we started, and with him the greater part of my baggage. Nine loads were still wanting, including the whole of my store of butter. He now began to make all kinds of excuses, and depreciated and cursed the people, &c., while extolling his own virtues; but as my acquaintance, Biábo, the chief of this district, most kindly offered me men, I was able to continue the march at once. Some delay was occasioned by the arrival of messengers from Kabréga, who in his name ordered Msíge to return the things he had taken on the way as compensation for his broken head, and said that on his return he might make complaint and seek redress.

From eight to ten o'clock A.M. we fought our way through grass and reeds, rested a little in a banana grove, and at last, tired and exhausted, arrived at two o'clock at our station, Kisúga, whence we returned, after a day of rest, across a flooded country to Mrūli. My missing baggage was returned to me a few days later, uninjured and in good condition.

I wish here to draw particular attention to the fact that in

Unyóro, Úgánda, Usóga, and Karágwa the names of *places* are used equally for the small *districts* surrounding them, so that two travellers may have apparently visited the same place, and yet their descriptions of that place may not exactly tally. In this way may be explained the divergences which have been found between Speke's most excellent astronomically fixed positions and those of later observers.

5. A Description of the Wanyóro.

PERSONAL HABITS—DRESS—ARTICLES OF FOOD AND LUXURIES—HUNTING—HUTS—MANUFACTURES—THE WIFE AND THE FAMILY—BIRTH—A PUBLIC MEETING—MARRIAGE—PROSTITUTION—PROPERTY AND THEFT—THE GOVERNMENT—THE KING'S PRIVILEGES—HISTORICAL AND COSMOGRAPHICAL FABLES—THE BELIEF IN MAGIC—ORACLES—THEIR GEOGRAPHICAL KNOWLEDGE.

The Wanyóro, though they do not despise the flesh of a cow which has died a natural death, are very clean and particular in their eating and in their persons. They will never eat on the bare ground; even on a journey they carry with them a little mat for a tablecloth; but, strange to say, they do not wash their cooking-pots after using them. Washing is much in vogue, but notwithstanding the cleanly habits of the people, there unfortunately exists a quantity of vermin, which especially infest the bark cloth. The custom therefore prevails of fumigating the cloth every two or three days with smoke from pieces of dried papyrus-stalks stripped of their bark; the thick and peculiarly pungent smoke is said to drive away parasites, and at the same time imparts to the material a perfume perceptible at some distance. As for scents, however, for rubbing on the body, a kind of sweet-smelling very compact grey clay is used, and a species of touchwood which smells like musk. The clay is brought from the south, and is sold at a high price. The body is always clean shaved, the head only as a sign of mourning.

The Wanyóro cut their finger-nails in the form of a triangle,

the vertex of the triangle being in the middle of the naii. All cuttings of the hair and nails are carefully stored under the bed, and afterwards strewn about amongst the tall grass. All the Wanyóro extract the four lower incisor teeth, the Wákidi (Lángo) one or two incisors, as also do the inhabitants of Chopé (Shúli), but the Wagánda do not extract any.

Brother, sister, brother-in-law, and son-in-law are the recognised grades of relationship. I have never noticed any intimate connection between more distant relations.

The food of the Wanyóro consists principally of vegetables, bananas, sweet potatoes, *Helmia bulbifera*, gourds, corchorus, purslane, &c. All these are made into a porridge with ground sesame seeds, except bananas, which are plucked before they are ripe and roasted. Ripe bananas are seldom eaten; they are used to make *mwénge*, an intoxicating drink. Eleusine corn, finer-grained and of a paler colour than that grown farther north, is rubbed into flour with hot water, which removes its bitterness. When meat is to be had, it is eaten, even if very high; the bones are broken in pieces and boiled with the meat, and then the marrow is eaten, but it is much disliked when raw. Marrow, with termites (*uswa*) and sesame, is made into a dish "of which a man leaves nothing for his children." Blood boiled with butter and salt is only eaten if meat is scarce, and then but by few. Milk is drunk fresh and unboiled. Game (antelopes, &c.) is a favourite food, while elephant's flesh is never eaten, and hippopotamus meat is shunned, as it is thought to produce skin diseases. Many of the Wanyóro (in the lake districts) are industrious fishers, and eat fish with great gusto; but others entirely avoid and despise it, as well as fowls and eggs.

Salt is obtained in large quantities near the Albert Lake, at Kibíro and Mbakovia, by lixiviation from the clayey soil, and is taken for sale as far as Ugánda. It is for the most part grey and dirty, and has a strong taste of saltpetre, but from the same district good white salt can be obtained. The poorer people prepare salt by soaking the ashes of papyrus and rushes in water. The lye is filtered through a vessel filled with hay, having a bottom pierced with numerous holes, and is used in a liquid state. All the Wanyóro eat salt. Fire

is produced by holding a stick vertically in a shallow hollow made in another stick lying horizontally, and twirling it quickly round; the spark is caught in hay or old bark cloth. This process, however, demands a good deal of skill. The honey of wild bees is much liked; it is eaten alone or with porridge.

Durrah and eleusine are mashed into a thick porridge, and cooked with sesame, butter, honey, or meat broth. Roots, too, are used, such as wild yams and a very bitter red root (*coccinia ?*). Manioc is eaten only in the south. Sweet potatoes (*Batatas edulis*) are boiled in water. Pepper (*Capsicum conicum*) is avoided, as productive of sterility; while a solanum with small orange-coloured, cherry-shaped fruit, of disagreeable taste, is much liked, and is even eaten raw. Gourds are planted in great numbers, and are made use of as food and as vessels. Leguminous plants are much prized, such as *Phaseolus lunatus, Ph. mungo, Vigna sinensis,* and two or three other kinds. Beef is eaten only by well-to-do people, goat's flesh universally.

The habit of eating earth is known in Unyóro, and is practised as a remedy for a disease to which both sexes are liable. The kind of earth most liked is that with which the termites are in the habit of arching over their passages on the trunks of trees, but ordinary earth is not despised. This practice, if long continued, is said to cause discoloration of the skin and hair, as well as general emaciation, and finally death. Nightmare is ascribed to overheating the body by food or clothing.

Throughout Unyóro and Ugánda the women are the cooks; but the chiefs employ men cooks (*mfúmbiro*), with whom they have made blood-brotherhood, and have separate kitchens for the men and women. The great chiefs always eat alone, and no one may touch or look at the dishes prepared for them. Inferior chiefs often invite their favourites to their table, and whenever a crumb happens to fall to the ground from the chief's hand, these men snatch it up at once and swallow it, in homage to their lord! Women eat in a separate place, and after the men have finished; it is considered a particular sign of favour when a woman is invited by her husband to eat with him, but the Wawítu women who spring from ruling families are

privileged in this respect, for they always eat with their husbands. The boys eat with the women. Meat is preferred cooked with vegetables, especially unripe bananas. The pots used for cooking are round, and exactly similar to the water-vessels, but smaller. The food, when ready, is poured into boat-shaped dishes standing on feet, which are placed on a mat; the company gather round them, and eat with their hands; spoons, however, cut out of gourd-shells, are in use. There are altogether three meals in the day. After eating, in which the Wanyóro are moderate, a strip of wet banana bark is used to wipe the hands. The fireplace used for cooking is often situated in a small compartment walled off by reeds (in Ugánda they have separate huts for cooking, called *fúmbiro*). It consists of five stones so placed that the longest and broadest is in the middle, and the others stand two in a line to the right and left of it (: o :), so that several vessels can be put on the fire at once.

For storing corn (eleusine) clean holes in the ground (*kubútta*) are used. Fish is split open, cleaned, and dried over a smoky fire; this is the method of curing employed on both lakes.

The drinks used in Unyóro are *sándi*, *mwénge*, and *mérvua*. *Sándi* is the juice of ripe bananas, freshly pressed out, and little, if at all, fermented. It is a pleasant drink, resembling wine, and slightly sparkling, and is more especially affected by the ladies; when it comes into the market at all it is rather dear. *Mwénge* is prepared by mashing bananas ripened artificially over a fire or underground, adding water and roasted durrah, and allowing the liquor to stand until it has become highly fermented. This beverage is sour, and very intoxicating. Its manufacture is described by Speke and Grant, who also give illustrations of the preparation of the durrah, or eleusine beer (*mérvua*), used all over Africa. Corn is not malted here. The use of *mwénge* is so universal in Unyóro, and particularly in Ugánda, that I believe many people never drink water. The Wanyóro take enormous quantities of it, and even little children drink it with the greatest delight. Yet I have never seen drunken men here as in Europe. *Mwénge* is either drunk from gourd-bowls or sucked up from

gourd-bottles through small tubes very elegantly worked. The lower extremity of the tube (*dusaka*) forms also a kind of filter for the turbid fluid. Each family manufactures drinks for its own consumption. Spirits, in spite of Baker's instructions, are not made, but are readily taken when they are to be had. In Ugánda the Arabs distil spirits from bananas.

Coffee-drinking is unknown, though the tree grows in the south, and berries are exported in large quantities from Ugánda to the north. The sugar-cane, which is cultivated everywhere, is eaten, but not made into sugar. It has been remarked before that many kinds of food are avoided as causing disease. Thus, the flesh of the hippopotamus and of the larger fishes is said to produce skin diseases. No reptiles are eaten, not even the python, nor is the raven (*Corvus scapulatus Daud.*), whereas all the larger rodents are consumed. For cannibals, who bear the general name of "*Valiabantu*" (man-eaters), there exist, singularly enough, different names in Unyóro and in Ugánda—*mseri* in the former country, and *mluggu* in the latter. Does this fact indicate that the custom is really practised?

It is remarkable how proud the wives of the chiefs in this country are. To begin with, they do no cooking; field work and water-carrying are left to the servants, and the mistresses sit on their mats and do nothing but smoke and talk. For clothing, they affect fine leather imported from Ugánda, covered with material made from bark, and adorn themselves with rings of brass and copper, strings of pearls round the neck and waist, sometimes also with anklets. The rings often cover two-thirds of the forearm. I have seen cuts or scars as ornaments, but only on women from the south-western districts.

The food of the people varies extremely according to their rank. Whereas milk is much liked by all classes, and the fat wives of Kabréga and the greater chiefs are only permitted to live on milk, except twice a week salt porridge mixed with broth, and sometimes a handful of raw salt, the lower classes, unless they are prevented by personal dislike or fear, eat whatever their limited agriculture and the animal world afford them. Kabréga himself eats bananas and beef only, and drinks milk and *mwénge*. His cook, as also all his body-servants, are

united to him in blood-brotherhood. To perform this ceremony a slight incision is made with a razor above the fifth rib on the right side. Coffee-berries are soaked in the blood, and are exchanged and eaten by those participating in the rite. The covenant thus made lasts for life. The parties to it never desert one another in danger, and frequent the houses and converse with each other's wives without constraint or suspicion. A case of breach of faith has never been known. I met with the same custom under the name "*pobratimstvo*" among all the southern Slavs.

Among the narcotics used, tobacco, which is much smoked by both sexes, takes the first place. It is called in Unyóro as well as in Ugánda "*taba*," and is obtained from two different plants, one of which—*Nicotiana virginiana*, the most common—has white flowers, tinted at the edge with pink, and reaches a height of about three to four feet, but bears only medium-sized leaves, which have a strong aroma, and suffer greatly from the attacks of insects. The other kind, much stronger in flavour, has fawn-coloured flowers, and is rather a smaller plant than the former, but it is dying out. It is also called "*taba*." Where the word "*irkabwe*," used in the market here for tobacco, comes from, I cannot tell; perhaps it is borrowed from another language (Galla?). I am inclined to believe that the species with yellow blossoms is indigenous. The leaves, without much sorting, are simply dried on the roofs of sheds; they shrink a great deal, and produce a very good tobacco, though of rather unattractive appearance, which is made up in bundles to be sold. It is generally known that tobacco grown on low-lying land is mild, and that from high ground strong. The tobaccos from Nkóle and the highlands of Ugánda are considered the best. The pipe-bowls are spherical, large, and strong, and are attached to long stems, which in Londú are formed of two pieces tied together with *varan*-skin, and are as much as five feet long. I have only seen *narghilés* (*argīlis*) in Usóga. Every one has his own pipe; but when he happens not to have it with him, he takes a few whiffs from his neighbour's. The larger the bowl of the pipe, the greater the gentleman who uses it; I have seen bowls which would easily hold a

pound of tobacco; they are half filled with glowing embers and half with tobacco; perhaps the carbonic oxide increases the soothing effect of the tobacco. The most singular pipes I have yet seen are those used by Unyóro magicians; a huge twin bowl, ornamented all over with short conical spikes, is fastened to a short heavy stem.

In addition to tobacco, coffee-chewing is also indulged in in Unyóro and Ugánda. The coffee-tree grows in the southern portions of both countries; it resembles the tree I have seen in Southern Arabia, only that the leaves of the kind which grows here are larger. The pods are gathered when still green, dipped in hot water and dried in the sun, and then sold and consumed without further preparation. Many persons, however, partially roast the pods. The taste of the pod is peculiarly aromatic, and causes a slight secretion of saliva; I could never discover any other effect; on the contrary, the natives maintain that a couple of coffee-berries will drive away hunger, and likewise that the berries are a remedy for over-indulgence in *mwénge*. It is customary among the better classes to offer one another a few coffee-berries.

Articles, when offered for sale in the market, bear names entirely different from those in everyday use. Whereas the ordinary word for tobacco is "*taba*," it is called in the markets here "*irkábwe*." *Phaseolus lunatus*, usually "*unverángo*," is called "*btúma*;" and bananas, usually "*bitóki*," are called "*kahénda*." I cannot at present venture to decide whether we have here to do with words borrowed from another language (the original language of the country, or the Galla idiom) or with mere provincialisms. The latter is improbable, for, later on, people in the Kikúnguru Mountains, who live at a considerable distance, and have no connection with Unyóro, identified the words when I mentioned them. Besides those given above are the following:—*Viakónga* (*mwénge*), a drink made from bananas; *júru* (*megíta*), butter; *rumómoro* (*ayata*), sweet potatoes; *rengua* (*munyu*), salt; *kyányoa* (*nyáma*), meat; *kabúmba* (*busiáni*), flour; *udívua* (*muári*), coffee; *karamanyázo* (*isomú*), a spear; *kizvéko* (*mbúgu*), bark cloth. The names enclosed in parentheses are those in daily use.

Among the crops cultivated in Unyóro are yams (*birai*),

Helmia bulbifera (*makíngo*), and *Voandzeia subterranea* (*mpándi*), which is here self-coloured, red or black, and boils quite soft, in contrast to the hard, speckled Bari variety. Manioc (*Manihot utilissima*) is only to be found in the south of the country, and has been introduced from the other side of the equator. *Phaseolus mungo* (*ntoyo*) is much esteemed, and seems to be widely distributed; I remember seeing this kind in Southern and Eastern Arabia, where it is called *munge*.

My attention was repeatedly aroused in the evening by a drumming, rapping noise, which continued far into the night. It was produced by the collectors of termites, who light a fire beside the "*kánatir*" (ant-hills), and, as they imagine, induce the male termites to swarm out more rapidly by beating pieces of wood together. These insects are eaten raw or roasted. They are called *uzvá*, and their hills *kizvá*.

It is a curious fact that, among all the Negro tribes in this part of Africa, domestic animals, kept in confinement, are exceedingly rare. The negro's mind is not adapted for taming wild animals; his nature is entirely negative. Here and there one comes across a domesticated wild cat, or perhaps a house-cat brought from the north. The dogs are of medium size, with slightly pointed muzzles; they carry their rather long, short-haired tails erect, are lop-eared, long-bodied, lean, and usually of a buff colour.

Hunting parties often take place. When they are arranged privately, those that take part in them choose the leader among themselves; but when they are set on foot by the chief of the tribe, he appoints the leader. The man who throws the first spear at an animal receives a fore-foot if it is killed. The division of the booty is effected by general agreement. If the game runs on to ground belonging to another man, and dies there, the owner receives the right fore-foot. If a leopard or lion is killed near the king's dwelling, the whole animal is carried to him; if the place where the animal is slain is too far off, only the skin is brought to the king. When people kill one of these animals on foreign soil, the skin belongs to the king of the country. One tusk of all elephants slain belongs by right to the king, the other may be kept by the hunter, but the king usually gives him a girl in exchange.

The huts of Kabréga's capital are grouped in threes and fours, surrounded by straw fences, and hidden away in banana woods and in depressions of the ground; but being scattered about in large groups, they cover a great extent of ground; there may be, perhaps, more than a thousand of them. All are built in the hemispherical form typical of Unyóro; most of them have two rooms and high doors with porches. Only Kabréga and his principal chiefs possess large *zeríbas*. The whole settlement shows signs of incompleteness, but Kabréga has only lived here since the occupation of the station Londú by our soldiers. There are at present no fields in the neighbourhood. Here and there between the filthy huts small markets are established, where flour, salt, coffee-berries—which are very dear—and meat are the current articles, to which are added sheep, goats, cows (rarely), bark cloth, spears, tobacco, beans, and butter neatly wrapped in banana-leaves. *Símbi* (cowries) serve as money. They are strung together, 100 on each string, and 500 are equivalent in value to about three and sixpence. A very small basketful of flour costs ten *símbi;* meat is sold by the piece, the slaughterer to whom the beast belonged fixing the price. Sheep, which here are lean, and goats cost 1400 *símbi* each; an ox 4500 to 5000 *símbi*.

Some five or six smithies are scattered about the village, each employing four or five workmen. I have described elsewhere the fireplace, bellows, and pipe. A large flat stone, with a smooth even surface, driven into the ground, serves as an anvil; a solid piece of iron, one end of which is beaten into the form of a handle, does service as a hammer. There are, too, gourd-bowls filled with water to temper the iron, some small pitchers for melting copper and brass, and a contrivance made of wood for wire-drawing. Native iron, copper, and brass are worked into spear-heads, knives, razors, arm and leg rings, and necklaces, but the workmanship is by no means superior. Brass and copper come from Zanzibar through Ugánda. The smithies are also meeting-places for all lovers of gossip. Guns are repaired by Wagánda smiths, who come here periodically, but they are very exorbitant, *e.g.*, demand a female slave in exchange for a gun-cock.

The preparation of cow-hide for clothing is very simple.

The hide is tightly stretched on level ground by a large number of small pegs, and then scraped with knives until all bits of flesh are removed; then it is dried, and rendered pliant by rubbing in butter. Every fall of rain makes the hide stiff again, and then fresh rubbings are necessary; that this process is not exactly agreeable to the olfactory organs of the bystanders is evident. Every one wears hides and bark cloths; men prefer cow-hides, women goats'-hides, four of which sewn together make a dress. The manufacture of cloth from the bark of various kinds of fig-trees, which are planted in the banana groves, has been fully described by Baker, and likewise the mallet (*nsámu*), made most commonly from the wood of *Dahlbergia melanoxylon*, which is used for beating it. This cloth is also made here; but the finer, handsomer pieces, those in particular with black patterns, which only Kabréga wears, come from Ugánda, where the people excel in the manufacture of these goods. I saw an elderly woman, wearing a fantastic head-dress of feathers and skins, sitting in an isolated hut; I was told that she was a very famous witch; she would not, however, enter into conversation, but went on patching up her torn dress perfectly unconcerned.

About midnight I was awakened by a great commotion, and saw two houses in the village in flames. Fortunately there was no wind blowing. Everything was damp from the daily rains, and therefore the men soon succeeded in subduing the fire. No excitement of any kind was perceptible, fires being of too frequent occurrence. As before stated, the floors of the houses are padded with a thick layer of hay, and the fireplace stands in the middle of the house. Very often, too, the master of the house lies down to sleep intoxicated, with his pipe alight, and so the mischief is done.

Until their marriage, the girls in the Unyóro villages go about perfectly nude, even when they go out of the house. The married women are also naked in the house, but never in the presence of servants or of strangers. It constantly happens that young girls spend the night with their lovers, only returning to their father's house in the morning, and this is not considered scandalous. If a man, however, is caught in a girl's hut, he is beaten until he pays a cow as ransom. If

a girl becomes pregnant before marriage she is taken by her parents to the house of her seducer, and remains there until her child is born. Should she die in childbirth, the seducer is also doomed to die, unless he ransoms himself by payment of six to nine cows. If she remains in health, her father takes her and the child, and the seducer may purchase one or both of them. The price for both amounts to six oxen and four sheep; for the child alone, if a male, one cow and four sheep; if a female, only four sheep or goats.

When two families are on friendly terms, and wish to make a match between their children, the two fathers, in the first place, visit each other twice or thrice to drink *mwénge*, and on such occasions many guests are invited. Then the bride's father goes to the father of the bridegroom, and offers him his daughter "for friendship's sake." After this, the price of the bride is discussed and fixed, and a great feast follows, to which both parties contribute. A few days after the stipulated sum has been paid, the bride is fetched in the midst of a large procession; amidst singing and dancing, and copious libations of *mwénge*, the way is taken to the bridegroom's house, where she is handed over to the bridegroom, and the whole company spends the night in singing, dancing, and drinking. The father of the bride receives for himself and his people the two hindquarters of the ox slaughtered on this occasion by the bridegroom's father. On the third day after the completion of the marriage, the whole village assembles to pad the hut of the newly wedded couple with hay, when fresh libations follow. On the sixth day after the wedding, the young wife visits her parents, and during this visit, of three or four days' duration, the husband keeps aloof. Fresh symposia given by the father of the bride bring the ceremonies to a conclusion. The young wife then returns to her house, and if her husband is in good circumstances, passes her time in smoking, coffee-chewing, idling, and paying visits.

When a woman is pregnant and labour commences, all the women of experience are summoned to assist her. She sits on her heels, her knees stretched apart, while one or two women support her back and arms, and the midwife sits in front of her, ready to receive the child. The delivery is promoted by rub-

bings over the region of the uterus. If the head presents, it is considered a good sign; if the feet present, it announces misfortune to the family. Should an arm presentation occur, it is replaced, and an attempt is made to turn; this operation is performed by men who receive special presents for the service. Should a woman die in child-birth, abdominal section is at once performed, and the child, whether living or dead, removed. The omission of this operation is punished by the chief with heavy fines of cattle, goats, and even women, for it is an exceedingly bad omen for the village. Many women die of flooding, probably arising from attempts to remove the placenta. The umbilical cord is cut with a sharp splinter of reed at a considerable distance from the navel, and is tied to the body of the child until it shrivels and falls off, which is hastened by frequent rubbings with fat. Ligature is quite unknown. The placenta of a male child is buried in the house on the inner, right-hand side of the door; that of a female child on the inner, left-hand side. Neither mother nor child may leave the hut before the cord has fallen off, nor may the mother shave herself. The new-born child is washed in tepid water, and then rubbed with red clay and fat.

The mother takes her child on the fifth day after the birth, and sits with it on the threshold, a sheep is killed, and the grandfather on the father's side, or, if he be dead, the grandmother on the mother's or father's side, gives the names. There are usually two, one of which is chosen at pleasure, while the other is connected with some bodily peculiarity. The skin of the sheep slain at the naming of the child is used to carry it in; the child is laid on the mother's back, and the skin placed over it in such a manner that its fore-legs are tied together over the mother's shoulders, its hind-legs round her waist. The child is suckled by the mother for eighteen months, and is then weaned by rubbing bitter juices on the breasts. During this time the woman lives apart from her husband. The women here grow old quickly; many are barren; most of them have only two or three children. Hermaphroditism is rather common.

The practices connected with the birth of twins are very singular. Universal festivities are held in the village, and rich gifts are brought to the mother from all sides. The first-born

(whether girl or boy) is called "*zingoma*," the other "*kato*." The placenta of living twins is placed in a large earthen vessel in a miniature hut, hastily erected in the yard, where it remains during four days, and is then carried in procession to another large hut built in high grass, and there left. But should the twins die, they, together with their placenta, are left in an earthen vessel in the hut of the mother until decomposition sets in. In this case also the miniature hut is erected in the yard, near which a man watches to scare away the hyenas, and then the exposure follows as before. During this time, a perfectly arbitrary period, the inhabitants of the house may not shave themselves, and they keep aloof from every one as a sign of mourning. When at last the exposure is over, the men and women cut their hair and lay aside for a time all ornaments (rings, &c.), and, finally, the house in which the birth took place is burned, expiation thus being made.

Among the causes which reduce the population of this country, unlimited polygamy is one of the most important. It would be absolutely improper for even a small chief to have less than ten or fifteen wives; poor people have three or four each. Now, as the chief in question has only four or five favourites, whom he always chooses from among the youngest, perhaps exchanging them for still younger ones when they have lived with him a few months, a large number of women are left fallow who would otherwise be capable of production. To this cause must be added far too early marriages. The fecundity of the women is confined to the years between twelve and twenty-five. Unyóro women are not very fruitful, whereas the Wagánda and Wákidi (Lángo) are often blessed with ten to twelve children. I have never seen women above twenty-five with babies.

If a man in Unyóro wishes to marry, he has to buy his wife. Four oxen or cows (three for less handsome girls) constitute the usual price, of which two, if the wife bears a child, are paid to her father, while the other must be kept ready for further disposal; that is, should the husband leave his wife, or be left by her, the two animals become his property. A divorced wife can marry again immediately, but her value in cattle is, of course, smaller. Children belong to, and remain with, the father.

If a man marries, and his wife falls ill and dies during a visit to her father's house, the husband either demands a wife—a sister of the deceased—in compensation, or receives two cows. There are instances of a man putting away his wife and afterwards taking her back again, a cow being killed on her return. When a poor man is unable to procure the cattle required for his marriage at once, he may, by agreement with the bride's father, pay them by instalments; the children, however, born in the meantime belong to the wife's father, and each of them must be redeemed with a cow.

Should the head of a house die without children, his brother inherits everything, even the wives; if there are several brothers, the younger ones receive small shares in goods and wives, according to the good pleasure of the eldest, who is the chief heir. When there are no brothers, the chief of the tribe inherits. But when there are sons, the eldest inherits all that is left by his father, the wives included, who, with the exception of his own mother, become his wives. The younger sons receive two women, two cows, and as much of the other property as the principal heir will give them. Wives and daughters have no share in the inheritance under any circumstances. If at the death of the head of the house there is a daughter left under age, the principal heir brings her up, and marries her. In default of male relations, the chief of the tribe fills their place, and usually takes such girls into his harem.

Theft is punished in Unyóro by confiscation of cattle or women for the benefit of the person robbed. When a man is killed, the nearest relatives of the murdered man have the right to seize the murderer and kill him with a spear, and they receive, besides, a cow from the family of the murderer. But should the murderer escape, and they apply to the chief of the tribe to procure the punishment of the guilty man, the chief receives from them nine cows and three sheep or goats as his due, in return for which he causes the murderer to be seized and killed, and exacts payment of the cow. Adultery, provided the injured man surprises the offender, is atoned for by a fine of four cows. If the chief is called upon to interfere he receives a cow. The guilty wife is beaten, and

she may also be divorced, in which case a very curious ceremony takes place. The injured husband cuts a piece of bark cloth in two, half of which he keeps himself, and the other half is sent with the wife to her father. When the cows formerly paid as the price of the bride are restored, this piece is returned to the husband, who then burns both pieces. Wives are seldom put away because they are childless, and the man is always blamed who does it. I have myself seen a curious punishment. One of the men who had been assigned to me here as servants had tied a string round his wife's neck, and fastened her to a tree, where she had to remain the whole night; and this—because she had told him a lie.

With regard to prostitutes, peculiar regulations exist. In Kabréga's establishment a great number of girls live as servants to his wives. They are usually good dancers, or are distinguished by corporeal advantages, and enjoy unlimited freedom at night. They are called *vranga*. As soon as their day's work is finished, they go out, and if they are addressed by a man they go with him, and remain at his house from four to five days, according to his wishes. It often happens that they follow a man who pleases them of their own accord, and stay with him. He is bound to comply with their wishes, and to provide them with food, &c. Their reward consists of cowries, bark cloths, dressed hides, and even slaves, according to the circumstances of the man they fall in love with. Should the reward fall below their expectations, they always appeal to Kabréga, who, in most cases, decides in their favour, although he derives no benefit whatever from them. All that they earn belongs to them, and should one of them amass a fortune, she sets up a *zeriba* of her own, and perhaps marries one of the king's slaves. Should one of them bear a child, it belongs to the king as a slave; if it be a boy, it is placed, later on, among the pages (*vagarággara*), and when grown up is enrolled in the bodyguard, always as a slave, but no reproach clings to him because of his illegitimate birth. If it be a girl, she is brought up to her mother's profession, and also remains, of course, a slave of Kabréga, who comes into no personal contact with these women. The institution seems to be very old, and Kabréga told me that

the first of such women were not Wanyóro. I have dwelt the longer upon this subject, because prostitution, although it prevails everywhere, is not officially sanctioned in any other Negro country.

Private property in land does not exist in Unyóro. The occupier is a serf, and unless he be carried off in a raid, remains attached to the soil, and changes masters with it. The Wahúma are exceptions to this rule, and occupy a peculiar position, already noticed by Speke. Their girls, however, are frequently carried off.

While in the north, and as far south as the Somerset Nile, earthenware is manufactured by women, the men do this kind of work in Unyóro and Ugánda. The Wanyóro, however, do not equal the Wagánda in this branch of industry. The milking of cows likewise falls entirely to the men, and a woman may never touch a cow's udder. Housebuilding and procuring of the requisite materials are also performed by men.

Salutations are strictly regulated in Unyóro. Men and women wish each other good-morning (*Raïróte;* answer, *Daabánte*) and good-evening (*Geróba;* answer, *Geróbera*), when they visit one another in the morning or evening. *Merembe* is the greeting exchanged on meeting in the street or on the road, and is followed by an oft-repeated *m*, spoken with the mouth closed. When a man leaves a party he says *Nkuába* (Thank you), and is answered by *Raínmi.* The word for thanks is *Vébbali*, or the more elegant *Nkuébasa* (I thank you). When a man meets another of higher rank, he kneels down before him, or stands with his body bent, until the other has passed by. There exist particular formulæ of salutation for the great chiefs. Thus for Kabréga, *Ngúnzono káli* (I greet the highest); for Riónga, *Ngúnzono diri;* and for Anfina, *Ngúnzono boki.* The inferior chiefs exact the same honours from their subjects that *they* pay to their superiors.

Under the name of *madúdu*, the custom prevails that if any one is robbed, and suspects another of the theft, he takes the supposed thief to the chief, before whom they both drink of a magic potion made from red wood, or give it to two fowls to drink. The guilty one, or the fowl that represents him,

becomes giddy, and is thus easily detected. This custom, observed also in Ugánda, is now disappearing, like so many other peculiarities, before the partial civilisation of the country, consequent on the Egyptian occupation. What I now note as customary may after a few years have become half legendary.

The whole of Unyóro is divided into large districts, over each of which a *makúngo*, temporarily appointed by the king, presides, whose duty it is to collect the contributions of cattle, corn, &c., due to the sovereign, and to administer justice; but he does not possess the right of pronouncing the sentence of death, which belongs to the monarch alone—not as in Ugánda, where every *makúngo* may put a man to death. Appeals are often made to the king by those sentenced by the *makúngo*. The petitioner kneels down before Kabréga's door at a distance of ten paces, and sets forth his requests. Kabréga then decides—not always in favour of the *makúngo*. A *makúngo* is dependent for provisions for himself and those belonging to him on the district he administers, in which he cultivates large tracts by means of his own slaves, and has his own herds. If he acquits himself of his duties well, he remains in office; if not, a small executive force is sent by the king, his *zerîba* is surrounded, and everything it contains —wives, children, herds, &c., with the exception of grown-up sons—is confiscated on behalf of the king. Another *makúngo* is appointed, who immediately enters into his office. They are bound to present themselves from time to time at the king's court with presents. Each *makúngo* appoints a number of *matóngali*, who administer sub-divisions of the district on the same principles. A *makúngo* usually retains all the *matóngalis* he finds in power on taking office, and hence this dignity is far more permanent than the other, often indeed it has become hereditary. Punishments consist for the most part in the confiscation of girls, women, and cows; a sentence of death is but seldom decreed by the king, for, as Kabréga very justly observed to me, "a dead man pays no taxes." Here, as in Ugánda, the bodies of those who are put to death may not be buried, but are thrown into tall grass.

My huts were situated on a hill, which slopes away gently towards the west and north, while towards the east and south

it ascends to the neighbouring mountains. Numbers of mimosas, fig-trees, and Combreteæ are dispersed among the grass, whilst tendrils of abrus and vines form regular tangles. At the western foot of the hill the watering-place for Kabréga's cattle is situated, a well about six feet deep, on a level with the Khor Kyáï, which flows close by. The bottom is formed of a deep yellow loam, and the water is also yellow. About six feet above the well, a long deep trench is dug in the ground, from which the cows and oxen drink, and beside it is a smaller basin for the calves. The trenches are filled by means of buckets, and every fortnight twenty to thirty loads of salt are thrown into the well. The only place in the Upper Nile district where I have seen smooth, fat cattle, is Kabréga's capital. They pass by to the watering-place every afternoon, about 1500 in number, most of them humpless, with enormously long horns. It is a pleasure to see the stately animals climb the steep mountain like goats; most of them are grey, but some are entirely light brown.

The following facts show the precautions taken to procure the king's safety. Apart from all the huts, near the *khor*, stands a small, carefully watched *tógul*, surrounded by its own *zeríba*. It covers the well set apart for Kabréga's sole use, from which the water required for him is drawn once a day at sunrise, and carried to his house in closed vessels. A *matóngali*, bound to the king by blood-brotherhood, is head of the watchmen. Similarly the cows, which supply milk for Kabréga's personal consumption, are kept quite separate; they are milked in his presence in the morning, and then go to pasture, escorted by a man and a boy. The boy goes before them calling out loudly, "the king's cattle;" and every one who happens to be near must withdraw as quickly as possible if he does not wish to be killed. When I asked the reason, I was answered, that there were people whose look could turn milk into blood, so that phenomenon is known here also.

The daughters of Kabréga's subjects are unconditionally at his disposal, but he marks his approval of any particularly attractive girl by giving her father a present of cattle. He possesses also, in accordance with the universal Wahúma (Ugánda, Karágwa, &c.) custom, all the wives of his deceased

father, and cohabits with them, his own mother excepted, who, however, does not enjoy the consideration she would receive in Ugánda. When one of Kabréga's wives is pregnant, a *matóngali* is summoned, in whose charge she is placed, and a district is set apart for her support. She remains there until she is delivered, and does not return until the child is three or four years old. Girls remain with the mother in the king's *zerîba*, and "when grown up, may be married to their own father." Boys, after they have stayed some years on the king's premises, are created *matóngalis*, and receive a district, in which they reside with their mother and tutor. Should the monarch die, all the tutors of the princes at once assemble and determine which of the sons of the deceased king is the best and fittest to be his successor. Naturally, the decision is seldom unanimous, but parties are formed and war breaks out, and continues until one of the princes overcomes his rivals, and gains possession of the throne, standing in the mortuary-hut of his father, whereupon his authority is recognised. Then his brothers and nearest relations, with few exceptions, are killed, for so custom demands (in Ugánda they are burned).

The corpse of the deceased ruler is washed immediately after death, anointed again and again with fresh butter, and, wrapped in light bark cloths, is placed on a high platform in a hut and *zerîba* erected on purpose. Under the platform a fire burns day and night—the favourite wives and servants of the deceased are present all the time—until the body is thoroughly dried and smoked; then the favourite steer of the deceased is killed, its hide dressed, and the corpse wrapped in it and in a quantity of bark cloth and other hides. The corpse remains in the house with the wives and servants until the war between the claimants to the throne is ended. This often lasts for years, and the new king's first duty is the burial of his father with the ceremonies, occasionally slightly varied, which Baker has described. In Unyóro, moreover, it is customary for the king, as soon as he falls seriously ill, or begins to break up from age, to be killed by his own wives, for, according to an old prophecy, the throne will pass away from the dynasty of the Wawítu in the event of a king dying a natural death.

Unyóro once formed, with Usóga, Ugánda, Uddu, and Karágwa, one great country inhabited by the Wichwézi. Then, people with a white skin came from the far north-east, and crossed the river (Somerset Nile). Their number was very great, and the inhabitants were afraid of them, for the white people were *valiabantu* (man-eaters). When the strangers had forded the river, they assembled in Matyum, a place still existing to the south-east of Mrūli, and determined to send a column to Unyóro, and another to the south (Ugánda, &c.) to take possession of these countries. The intruders called themselves "Wawítu," people of Wítu, a name still given to the ruling families; but the people called them "Wahúma," men of the north; in Ugánda also "Walíndi." They were and are herdsmen, whereas the Wichwézi were cultivators of the soil. As the Wawítu continually advanced, the Wichwézi retired before them farther to the west, many of them being drowned in the Mwutan-Nzigé (slayer of locusts) or Albert Lake, because they possessed no boats. The remainder were enslaved, and from their intermixture with the new comers sprang the present light-coloured race. Where the immigrants have kept their race pure, they are still quite white, as in Tóru and Gambalagála; where the Wichwézi have remained pure—and many of them still wander over the country as minstrels and magicians—they are quite black. The immigrants adopted the language of the aborigines, but to the present day speak among themselves the language of the Wahúma. In Unyóro the name Wichwézi is now synonymous with bondman, just as in Ugánda the word "Muddu" (inhabitants of Uddu), now denotes a slave. I give the foregoing narrative exactly as I have heard it in conversation here, and at the same time I am constrained to do full justice to the account given by my predecessor, Speke, whose work is beyond all praise.

In primeval times, say the Wanyóro, people were numerous on the earth. They never died, but lived for ever. But as they became presumptuous, and offered no gifts to the "great Magician," who rules the destinies of men, he grew angry, and, throwing the whole vault of heaven down upon the earth, killed them all. But in order not to leave the earth desolate, the "great Magician" sent down a man and a woman "from

above," both of whom had tails. They produced a son and two daughters, who married. One daughter bore a loathsome beast, the chameleon (*waisselikotto*); the other a giant, the moon. Both children grew up, but soon disputes arose between them, for the chameleon was wicked and spiteful, and at last "the great Magician" took the moon up to the place whence it still looks down upon the earth. But, to keep in remembrance its earthly origin, it becomes large and brilliant, and then decreases, as though about to die, yet does not die, but in two days passes round the horizon from east to west, and appears again, tired from its journey and therefore small, in the western sky. But the sun was angry with the new rival, and burnt it so that the marks are still visible on its face. The chameleon and its progeny peopled the earth, the tails were lost, and the originally pale colour of the skin soon became dark under the glowing sun. At the present time the heavenly spheres are inhabited by people with tails, who have many herds. The stars are watchmen which "the great Magician" (*Nyavánkya* or *Kágra*) posts during the night. The sun is inhabited by giants.

The belief in magic and amulets, as well as in the possibility of making people ill, or even compassing their death by means of charms and incantations, is widely diffused in Unyóro and Ugánda. Naturally no trace is to be found of the idea of a future life. In both countries the women are buried in the court of the house they have occupied to the right-hand side of the door, the men to the left of it. The graves are horizontal, and three to four feet deep. The corpse lies on the right side, as is usual in sleep. The Wanyóro, however, who live on the Albert Lake, bury their dead, men or women, in the middle of the courtyard, and erect above the grave a miniature hut, in which tobacco, pipes, bananas, *mwénge*, &c., are deposited. Young children are everywhere buried in the garden which adjoins each house.

There is a singular belief that certain men leave their huts at night, and kill travellers in order to eat their flesh or employ it in various magic arts. They retain the human form on their night excursions, but owing to magic power they cannot be caught. Spears and bullets do not touch

them, but strong long sticks do, and with these a man can drive them before him until at dawn they can be seen and recognised. The passion for human flesh runs in certain families, and is hereditary. The members of these families are useless as servants, and their girls make good-for-nothing wives, for they are perverse, and will not eat every kind of food. Such families like to introduce new blood by making matches in far-distant places. Girls from the neighbourhood will not stay with them, but run away, and will not reveal what they have seen. Women have the monopoly of a certain power of charming, which consists in bewitching vegetable or animal food with their eyes, and then giving it to some one to eat, who is immediately seized with violent pains in the stomach, which do not pass off until the charmer is brought and spits three times on the body of the sufferer. The belief in the evil eye, both of men and women, is universal; means of protecting oneself against it do not exist.

The cutting of children's upper incisors before the lower appears to be feared as bringing misfortune, and when it occurs, the *mbandua* (magician) is at once summoned to perform certain dances for the protection of the child, and is rewarded by a goat. Such dances, indeed, constitute a universal remedy for sickness. Epilepsy (*nsimbo*) is common, but is not considered hereditary; girls afflicted with this disease have a difficulty in finding husbands, and are frequently married without payment of the equivalent in cows. A remedy for the disease is unknown.

Insanity (*ilalu*), and also temporary mental aberration, are frequent; the latter is treated with herbal remedies, which effect an immediate cure by means of sleep and sweating. Polydactylism is rare. If the superfluous fingers are noticed at birth, they are at once removed; otherwise they are left. Smallpox (*blundu*) is much dreaded; as soon as any one is attacked by it, and the pustules are filled with matter, they are opened and washed with lukewarm water. As often as fresh matter is formed, the process is repeated, yet the sufferers usually die. Vaccination is quite unknown. Syphilis (*kabrevenju*) is very prevalent, but I have never noticed widespread disorganisation, and a tendency to self-healing always predomi-

nates. The sores are usually dressed with caustic herbs, and are thereby made worse. Exostosis is common, and its syphilitic origin recognised. The same is true of partial loss of pigment, especially on the hands, which is very common in Ugánda. Syphilis is said to have been unknown in Ugánda formerly, and to have first shown itself there in Kamrási's time. The disease then made its way to the east, and first appeared in the districts ruled by Riónga, whereas it was still unknown there in the time of his brother and predecessor, Kabadíma. (It has followed the track of the Nubians!) Excessive development of the *Labia pudendorum* sometimes occurs. In Ugánda, by methodical stretching and tying, a considerable lengthening of the *Labia minor* is produced. Circumcision is not in vogue, except among the inhabitants of Londú, who came from the west.

Africa seems to be the original home of the doctrine of predestination. Faith begets superstition. If an owl screeches near the house, its master dies. If a hyæna or a jackal repeatedly approaches the house, misfortune is at hand; when the rhinoceros-bird croaks, rain may be looked for. If a wagtail sings on the threshold, guests or presents arrive. If a man kills wagtails in the house, fire breaks out in it. If a wagtail forsakes its nest made in the house, misfortune is near. Vultures and ravens are chiefs among the birds, and their slaughter causes illness. If vultures alight on the top of a poor man's house, he will receive rich gifts and presents. Skin of the otter (*Lutra inunguis*) worn on the body acts as an aphrodisiac. A piece of the hide of the white rhinoceros, worn on the body, makes a man invulnerable. If a woman is the first to enter the house in the morning, it is a good sign; if a man, the contrary. An eclipse of the sun announces the death of the ruler. If on moving from one house to another, anything is broken or a woman falls on the way, the family returns to the house it has just left. If, on starting for a campaign, a buffalo runs across the path, or a guinea-fowl flies up before the warriors, this portends the death of many men, and everyone turns back. The bat, which flies into the house, brings news. The Wanyóro spit three times whenever they see a shooting-star.

Dreams are also well known to the Wanyóro, but it is not usual to interpret them. As oracles, the entrails of fowls are used, which are examined after they have been cleansed from blood and laid in lukewarm water; the augur decides from the colour and form of the convolutions and from any spots upon them. When an inhabitant of Unyóro is intending to travel, he questions the *mbandua* (magician) on the timeliness of the journey, and makes him a present. The verdict is given from the entrails of a red or black cock, its stomach being slit open while it is alive. If this verdict is unfavourable, the journey is put off. The cock is thrown into high grass.

When one evening Venus appeared in the sky in all her glory, I asked my companions the name of the star. "Nyánzi ya kwēzi," they called it, "the beloved of the moon." Baker's wife was named by the Wanyóro "Nyinyézi" (star), or "Nyádwe" (white pearl). Baker himself "Mlíju" (the man with the beard).

According to Unyóro traditions, elephants and chimpanzees were once men, and the dog too was gifted with speech, but spoke only to his master. I give a literal translation of some of these legends.

Legend of the Elephant.—In ancient times a man had an honest son, but he himself was violent, and had taken many cattle from his neighbours. Once upon a time he ordered his son to go and occupy a neighbour's house; if he did not do so he threatened to kill him. The son went and slept in that house, but found in the early morning that the inhabitants had fled. He durst not return home, whilst by himself he would have starved; so he prayed the "great Magician" to rescue him, and was thereupon, together with the house, turned into an elephant.

Legend of the Chimpanzee.—An honest man had an only daughter, and she was wooed by a neighbour for his son, who had turned out badly. The young couple lived happily for a short time, but when the young wife absented herself occasionally from the house to visit her parents, her husband reproached her with availing herself of this excuse to go after other men. Each day he treated her worse; so she fled, and returned to her father, to whom she related her misfortune, and

he, angry at the stain that had fallen on his own and his daughter's honour, killed himself. At this moment the son-in-law arrived, and was transformed by the "great Magician" into a chimpanzee. But the wife, who would not desert him in spite of all that had happened, followed him, and from them are sprung the chimpanzees, who still talk among themselves like men, and have a fondness for women.

But few geographical notes could be collected, and I abstain from giving these, lest I should fall into Baker's errors, who on the Albert Lake took the names of chiefs for those of countries. Khor Kaigiri on Baker's map is quite unknown here. I shall, perhaps, go south myself, and therefore need make no guesses. The land called by the Wanyóro, and by Baker after them, Koshi, is properly named "Lūri." Circumcision and even infibulation (?) are said to be practised there. Kabréga's father brought people from there, and settled them in Londū, and among them circumcision is still practised. They call themselves "Madundí." The district I am in is called "Mugaya," farther south comes Muëng, to the east lies Gangezi. The names of the surrounding peoples are in Kinyóro (and Kigánda) as follows :—

Name in their own language.	Kinyóro (Kigánda).	Country.
Lángo-Uméra.	Wákidi.	Kídi.
Shúli.	Wágani.	Gani.
Shefalú.*	Wáchope.	Chopi.

From some inhabitants of Usóga, who visited me, I received some geographical particulars. On the eastern frontier of their territory, five to six days' march from the efflux of the Nile from the Victoria Lake, lies, according to their statement, a place called Táka, which is surrounded by broad trenches (*sic!*), as a protection against the attacks of their eastern neighbours. These neighbours are the "Wasáwe," who wear clothes of cotton stuff, and fight with long swords, with which they can dexterously parry spear-thrusts. The eastern part of Usóga is called Amára or Uámara, and is up to the present time independent.

* Tâda is in the district near the Karúma rapids.

6. From Dufilé to Fatiko.

(*December* 27, 1878, *to January* 8, 1879.)

THE NILE AT DUFILÉ—CHARACTER OF THE SCENERY—CULTIVATED PLANTS—GORGE OF ĬGERI—RECEPTION AT FALŌRO—STAY AT NEW FALŌRO—HUT-BUILDING OF THE MÁDI—CULTIVATION—VOTIVE PILLARS WITH SKULLS OF ANIMALS—ABSENCE OF MONKEYS—THE AVIFAUNA OF FALŌRO—DRESS AND PHYSICAL DEVELOPMENT OF THE MÁDI—SINGULAR CUSTOM—RESPECT FOR WOMEN—FLORA ON THE KHOR SÍRI—NEW SITE OF FÁBO—VEGETATION AT FATIKO—RESTORATION OF THE CHIEF, ROCHÁMA.

In the Mohammedan world it is the universal custom, if a journey be absolutely necessary on a Friday, not to set out until the midday prayer is ended. Accordingly, we lost the cool morning hours, and had instead the pleasure of embarking in a temperature 97° Fahr. to gain the eastern bank of the river. The river was for the time of year (December 27, 1878) extraordinarily high, doubtless owing to the damming back of the water which was caused by the obstruction that had occurred in the north. The eastern bank, which falls steeply to the river, was covered with water far and wide, and the numerous stately doléb palms, with multitudes of geese and other waterfowl, and here and there a stately yabirus (*Mycteria senegalensis*) fishing among them in the shallow water, presented a lively, pretty picture, the enjoyment of which was only disturbed by the lowing of the cow, as she swam with all her strength, fastened by a rope to the stern of our boat.

An extensive plain, now covered with dry grass, extends northwards and southwards from the water's edge; the doléb palms give place to isolated sycamores and mimosas, which are stunted owing to the constant fires; here and there for a considerable distance the stiff grey clay soil, mixed with patches of fine whitish yellow sand, lies bare. While on the right, the soft outline of the hills of Leré runs parallel to the route, on the left, at the distance of a few miles, a line of woods is visible, above which rise three or four isolated domes. Towards the south the land rises by gentle undulations. The

country abounds in game, to judge from the numerous tracks leading to the river; elephants also appear to be plentiful.

After a short march we reached the bend of the Khor Unyáma, and, immediately afterwards, the remains of the former *zeríba* Jéifi, which was deserted by its inhabitants a short time ago, because, as they told me, the fields had "grown old," that is, were exhausted. In the middle, among the ruins of houses, rises the magnificent tamarind under which I passed a night three years before on my first journey to Ugánda. The steep walls of the *khor* permit the formation of the ground to be clearly seen: stiff grey loam, with solid masses of vegetable debris, rests on firm red clay enclosing many blocks of conglomerate. As, in the course of conversation with Negroes, who had come from the surrounding country, and many of whom I had known formerly, some offered to serve me as guides, I chose to continue my journey to Fatíko by the rather longer, but at any rate more interesting, way past Falōro and Fábo.

Our night was disturbed by legions of mice and several concerts given by hyænas. Our porters appeared early in the morning, and headed by Shúa, chief of the neighbouring village, Faniōro, we marched in a south-westerly direction over a gently rising plain, where agriculture is largely carried on. Passing between fields from which the sesame and the second crop of durrah had just been gathered in, we reached the *zeríba* Faniōro (not Speke's Faniōro), an imposing collection of houses with a very dense population. We changed some of our porters here, and then crossed another undulating plain, extensively cultivated, above which, far to the left, there appeared two mountain peaks. Besides the plants cultivated in the north, I saw here a kind of hibiscus with large bright yellow blossoms, the pods and seed of which the people boil down into a gruel. This hibiscus is found also in the Bari district, but is never cultivated there.

Khor Igeri flows through a deep gorge. After passing it we descended a steep declivity strewn with rocks, to the Khor Irári, a considerable, never-failing brook with crystal-clear cold water, which is joined by the Khor Iládze a little below the ford. Both these streams are obstructed by huge blocks

of rock, between which the clear water rushes merrily along, and slender doléb palms are reflected in it. On the banks lay many fresh-water shells, which unfortunately were so disfigured by fire that they were unrecognisable. The path now again wound upwards between ledges of gneiss, until the summit of the hill was reached, when a long chain of mountains came into sight on the right. A little pool beside the way harboured a fine Varan (lizard), which would have been caught, had any one dared to go near his long tongue—it is a dangerous creature.

Open woods of stunted trees with stiff leaves, most of which were much damaged by fire, covered the slopes of the hill, alternating with stretches of high grass, equally stiff and dry. The red ochre deposited along the margin of a stream trickled down the hillside, and its water, upon which played all the colours of the rainbow, proved the presence of iron in the soil. The puddles were choked with water-lilies. Khor Yúba, the last large watercourse before reaching Falōro, with its tall shady trees and luxuriant underwood, presented a woodland scene surprisingly beautiful for this part of the country, and reminded one of the southern *khors*. Again the path wound up hill in the direction of the mountains. Short stretches of wood and fields followed one another in quick succession: in the latter sesame was spread on platforms to dry. When we reached the top of the hill, an imposing village lay before us, enclosed in a high stockade; this was Falōro, the goal of our day's journey.

The chiefs of the place are two brothers, who, since the occupation of the place by the Danagla, have borne the nicknames of "Hyæna" (*dab be*), and "Fox" (*bû husein*). Dabbe came at once to greet us, and brought two small elephant's tusks as a present. They received presents in return, and promised porters for the next morning. Their mother, an aged dame, who seemed to enjoy great consideration, appeared afterwards to beg for some beads and bars of copper, and to bring her present of beautifully white flour made from a light-coloured variety of *telabún* (*Eleusine coracana*). Tomatoes, which have grown wild here since the time of the Danagla, as well as bananas, are found in abundance. The Falōro of the present day does not stand on the site of the old Danagla station, the position of which was

determined by Speke, but somewhat farther to the north-east, on a hill at the foot of the mountains, which present a magnificent view.

Falōro is a large village with plenty of inhabitants, handsomely built houses, and very numerous corn-stores, which indicate abundance of cereals; between the houses lie small open spaces or tobacco plantations. The houses are either mushroom-shaped or hemispherical, and when there is an outer wall, it is made of wattle and daub, while sometimes an open colonnade formed by the projecting roof surrounds the house. The doors are always so low that the people have to crawl through them; mats of bast supported by a strong stake form the door, which is closed when the occupier goes out. The floor is made smooth, a hollow near the wall forming the fire-place. A sort of slanting couch made of round pieces of wood, and raised on four legs, occupies one part of every house. The clay and gourd vessels are of the usual shapes. The corn-stores—baskets made of split bamboos neatly woven together—stand on three or four legs, are covered with conical roofs, and are often strengthened with clay, and whitewashed.

Sesame, white durrah, eleusine, hibiscus, sweet potatoes, yams, mungo beans, a Canavalia with round red beans, as well as some other Papilionaceæ, and tobacco are cultivated on a large scale. Bananas, which have been introduced here from Wádelai, thrive well, but are not much eaten. Bushes of a white-blossomed Tephrosia, about six feet high, show that fish are caught in the neighbouring brooks.*

Votive trees may be seen here and there between the houses; upon them are suspended skulls, antlers, horns, and teeth, including those of leopards, small cats, *Bos bubalus*, *Antilope leucotis*, *A. ellipsiprymna*, *A. oreas*, boars, &c. Lions are rather scarce, leopards very common. It is singular that no monkeys are seen all the way from the Sobat to Falōro, unless the occasional appearance of Cynocephaloids in the large forests beyond Shambé and Bōr be taken into account. Along the river they are entirely absent, as is also their companion, the well-known green parrot (*Palæornis torquatus*), of which I

* The beans of some varieties of this species are used to stupefy the fish.

obtained in Ladó only two specimens in four years. *Colobus guereza*, which I frequently found south of 2° 15′ N. lat., is also not to be found on the river; but I have received splendid skins from Fadibék (3° 30′ N. lat.), and believe I may consider this to be its northern limit in our province. Here, in Falōro, *Schizorhis zonura* is heard remarkably often; the pairs keep faithfully together, as is the case everywhere, but they are very shy. By the brook which runs past Falōro *Pluvianus ægyptiacus* greeted us. Flocks of Fringillidæ rose from the fields. Unfortunately there was no time for sport.

Of all the riverine tribes, the Múdi (to whom the inhabitants of Falōro belong) lay most store by dress and ornaments. They are a fine race of men, most of them above middle height, of a light chocolate-colour, and with well-developed muscles, slightly projecting under jaw, a strong growth of hair, and large flat feet. The men in particular delight in fantastically dressing their hair, building up layer upon layer into an elaborate curly structure. Iron rings on the arms and legs, neck-rings of the same metal, of which there are often several, one above another, becoming smaller towards the top, so that the neck is tightly pressed together and the movement of the head is restricted, ornaments of glass beads, chiefly white or crimson, brass and copper rings on the fingers, all kinds of amulets of wood and roots, and long strings of splendid iron beads round the body and neck, form the outfit of a dandy. The men, moreover, paint themselves curiously in red ochre. Individuals with black bodies and red legs, others with heads and necks red all over, others again all black, with round red patches on the cheeks and forehead, are met at every step. The more wealthy wear the skin of an antelope tied above the right shoulder. The beautifully marked skins of the *Tragelaphus scriptus*, which, however, is rare here, are especially sought after for this purpose. In default of a better skin that of a goat is used.

The women, in contrast to the men, are very sparely clothed. A shorter or longer tail of twisted cotton threads, generally brown, is attached to a string of glass or iron beads slung round the waist, and hangs down the back, and a covering in

front, no broader than a hand, distinguishes the married women from the girls, who wear nothing but a string of beads round the waist. The women, however, are not without their ornaments in beads, iron, or brass, the ears especially being loaded with them, whilst the under lip is often pierced to receive a small rod of brass.

A peculiar custom with regard to girls and boys prevails among the Mádi, and also among their neighbours, the Shúli. Buildings raised above the ground are scattered about among the houses of the village. They are very like large granaries, but have in the front an oval doorway, and are smoothly plastered with clay; before them there is usually placed a bench constructed of pieces of wood, to render the entrance more accessible. As soon as signs of puberty arrive, the girls sleep in these huts, and boys who have reached maturity have free access to them. Should a girl become pregnant, the youth who has been her companion is bound to marry her, and to pay to her father the customary price of a bride. If I remember rightly, Burton reports a similar custom as prevailing among the peoples dwelling to the south of the equator. While girls thus enjoy great freedom, and are able to choose companions to their liking, the higher position held by women among the Mádi is also shown by the fact that they are never beaten, and are often called upon to give advice. If a Mádi receives a present, he never omits to ask for one for his wives too. Polygamy is unlimited, provided only that a man is in a position to purchase wives. The house-work alone devolves upon the women, while the fields are tilled by the men and boys.

The Mádi language reminds one, by its intonation and jerky emphatic utterance, of the tribes on the west of the river. I was certainly exceedingly surprised to find that my servant, a boy from Lúbari, on the west of the Albert Lake, who had never been in the Mádi country before, could converse fluently here. Communication with the west through Wádelai is still carried on to a great extent.

We had to camp out in the open, as, trusting to the advanced season of the year, I had not brought a tent with me, but a heavy thunderstorm soon compelled us to requisi-

tion a house for ourselves and our baggage. We had hastily put everything under cover, and were seeking the repose we longed for after our long march, when a regular invasion of bugs forced us to vacate the place as quickly as possible. It is evident that this pest came with the dirty Danāgla from Khartúm and Dongola, and thrived here; but that these vermin kept their ground and flourished in this precise spot without crossing the frontiers of Falōro, while they may be sought in vain in other equatorial regions, is at any rate worth mentioning. The rain lasted the whole night. In the morning I was told that my arrival certainly brought luck, for the rain had come with me.

Close beside the principal *zeríba* of Falōro are situated three other *zeríbas*, enclosing many houses, and between them a path led us to a high rocky ridge, running obliquely across the road, which took us down to the Khor Rádzi. Here, in a cleft of the rock, lay a beautifully marked python, some thirteen feet long, benumbed with cold, which the Negroes immediately devoured. After twice crossing this *khor*, we ascended to the *zeríba* Peggo, lying in the midst of crops upon high hills, which extend obliquely across the road from the right. Upon their slope we passed the Khor Síri, a large brook of beautifully cool water, flowing from S.S.W. to N.N.E. which we forded with some difficulty, owing to an island formed of huge stone blocks which lies in it; the water came up to our thighs. We crossed a few more brooks, and then came upon a motley collection of open woods and fields of durrah, sesame, and hibiscus. The high bluish-green foliage of the *Anona senegalensis* is found here (northern limit); the waving branches of *Grewia mollis* hang over the path. All the hill-slopes, where there is sufficient moisture, are clothed with open woods of Terminalias, free from underwood. Long stretches are covered by a tall Solanum with yellow fruit; it springs up in large quantities on ground that has been formerly cultivated. *Tmetoceras abyssinicus* stalked solemnly about in pairs over the corn-fields, their hollow-sounding cry foretelling rain, they say, and high in the air a lark was warbling.

After giving our porters a short rest at the Khor Lazimon,

the banks of which are bestrewn with numbers of granite blocks, we arrived at the village Faómo, which had been completely destroyed by fire a few hours before, but was already in course of rebuilding. We saw from the ruins that the houses are divided by a high clay wall into two rooms with a door between them.

At this point we came upon a sea of rustling grass, broken occasionally by small woods; and at last, after a short but very monotonous march, we arrived about noon at Fábo, another important village, where we were to stay for the night and change our porters. This Mádi village is not identical with the Danāgla station of the same name visited by Linant, but is situated on the other side of the Khor Asi, which winds round it, and after joining the Khor Eyúpi, a little below the *zeríba*, flows into the Khor Unyáma.* Eyúpi is the larger of the two. The old settlement lay about half an hour's journey farther to the south-west, according to the statement of the natives. Here too we were very kindly received, but I was somewhat surprised that at this place and at Falōro I was asked to request the Government to send Danāglas here again.

The *zeríba* is similar to that of Falōro, but is less densely inhabited, because most of the people live in two adjacent villages. My descriptions of the architecture, customs, and cultivation of Falōro are applicable here. About five minutes' walk to the south-west of the *zeríba*, the Khor Asi flows over rocks from north-west to south-east. Its banks are edged with luxuriant vegetation, and fine bananas are mingled with the other trees, from which are suspended numbers of long straw cylinders that serve as beehives; the honey is yellow and very sweet. Made wiser by the experience of the night before, we encamped under a tall sycamore; but soon the threatening storm-clouds indicated a rainy night, so we sought shelter under the roofs of some empty granaries. This protection, however, unfortunately proved insufficient when the rain rattled down. The very uncomfortable night was in some measure enlivened by a visit from a hyæna.

* For the actual course of these rivers see the accompanying map, from which it will be seen that the Eyúpi and Unyáma are distinct rivers.—E. G. R.

Cold and shivering, we set out again at six o'clock on the morning of December 30th (here one feels acutely a temperature of 66° Fahr.) After crossing the two *khors*, Asi and Eyúpi, we reached the *zeríba* Faquéri, where we had to wait some time, because three porters had run away and had to be replaced. Open wood, crops, and grass were then passed through, two small mountains before us serving as landmarks. A short distance in front of them Khor Otsamé flowed from S.W. to N.E., and on its banks many Amomums flourished.

From this place to Fatíko the ground rises in terraces; plateau succeeds plateau, bordered as a rule by high hills or isolated mountains; wherever a stream favours their growth stand quantities of fine doléb palms. Khor Unyáma, which we now reached, is the main artery of the water-system of this country, and here presents a lovely aspect, being clothed with rich vegetation. As we approached the plateau of Fatíko, the ascent grew continually steeper; rock ramparts had to be surmounted, and dome-shaped heights often flanked our road on either side. Well-peopled *zeríbas* were visible on four small elevations to the right of the road; a Vitex laden with ripe fruit, and standing on a bank of stones, provided us with a good halting-place and sweet fruit. Then the journey was continued, and after passing some small Shúli villages, near which were very extensive tobacco plantations, we reached about 4.30 P.M. our station, Fatíko, formerly Baker's headquarters in the Shúli district.

As a stay here of several days was necessary to transact official business, leisure was afforded for collecting; but, in spite of all my pains, I could not get a Manis, though the animal is to be found here. Baker has published so much concerning Fatíko and its neighbourhood, that it would be useless for me to go into details. Very little change has taken place since his time, and Fatíko is still the granary of the whole country from Dufilé to Mrūli.

So early as Baker's time, Rocháma (Rot Yarma) was chief of all the Shúli, and his first visit to Baker is fully described in the latter's "Ismailïa." It was chiefly owing to Rocháma's influence, that his people allied themselves so willingly and so closely to the Egyptian Government. Nevertheless he was so

insulted by a later commander of Fatíko, that he completely withdrew, and was not seen for years. I was the more surprised, therefore, at receiving a visit from his son, who invited me to go to his father, for he had heard of my visit to Kabréga.* Rochámа wished to have a talk with me, but did not dare to come here, so, as our side had done the wrong, I willingly assented.

We turned in a direction nearly due east, towards the grand forest which covers the slightly rising undulating ground before us. Terminalias, isolated acacias, doléb palms, Ficus, Combretaceæ, resplendent with red blossoms, an occasional date-palm, Vitex, and Albizzias, between which here and there a gigantic Dahbergia or an equally beautiful tamarind peeped forth—all these formed a rich display, and, with their feathered inhabitants, provided so many objects of interest that the journey of an hour and a half to Otóngole passed very quickly. We left the little village just mentioned on our left, hidden among bananas and tall trees, and surrounded by masses of rock, but all the inhabitants were assembled on the rocks to see us pass by. Proceeding in the same direction, we entered more extensive woods, and came at last to a large *khor* in a deeply sunk bed, on the farther bank of which stood the village Bayíra, Rochámа's headquarters.

A guard of honour awaited us, composed of about twenty of the chief's servants, dressed in coloured cloths, and armed with old muskets; he himself stood on one side, surrounded by a group of Negroes, freshly painted red and clothed with skins, all awaiting my arrival. We were now requested to wait a moment until the two goats we had brought with us were killed and their blood sprinkled on our path; then Rochámа stepped across the blood to greet me by touching my hand, and then he led me into the village near by, where an *ankareb* was placed for him under a tree, and my chair stood near in the shadow of a house. On either side of the chief stood guards, muskets in hand; before him knelt a young man who appeared to be his confidant; some 250 to 300 painted Negroes in the most diversified costumes, with iron and bead ornaments, crowded

* Speke has already alluded to communications between Unyóro and Gáni. Gáni is the Kinyóro and Kigúnda name for the Shúli district.

round us, mingling with armed men, women, children, dogs, and fowls—an animated scene.

The Shúli chief is an old man with a curious squint; his gala dress consisted of fresh red paint, an antelope skin over the shoulder, and some iron rings. He seemed very pleased with the presents I had brought for him, gave me in return a splendid elephant's tusk, and then sent for his better-half, a very old woman, who, however, still appeared to take pleasure in glittering glass beads. When our official discussion was concluded to our mutual satisfaction, I left the old gentleman to indulge in *mrissa* with his subjects about him, while I took a walk through the little village. I must here remark that Rochámа's proper capital lies about six hours' journey farther on, beyond the Khor Asa.

The construction of the houses here strikingly reminds one of the Shíluk huts; the huts for girls and boys already mentioned, when speaking of the Mádi, are also found here. Votive trees, hung over with skulls, are common, the skulls of dwarf antelopes and rodents being conspicuous among them. At the foot of one of these trees stood a pot with small-leaved Liliaceæ; little pieces of it are laid over traps to ensure success to the trapper. The chief implements are of the usual description, except that the *murhakka* (grindstones) are neatly encased in clay. The spears only differ from those of the Wanyóro in having a broader blade; the shields are oblong, with sides curving inwards, and are made of buffalo hide. The clothing of men and women, their ornaments, &c., are exactly similar to those of the Mádi. Dogs and cats were the only domestic animals visible.

As the weather looked threatening, we were obliged to think of returning home. A drink of honey-water was brought me by a black Hebe, and then, accompanied by a large escort led by the chief, we set off. At the *khor* the whole company took leave of us, and we returned by the way we had come; but rain beginning to fall, we were compelled to seek shelter in the village of Otóngole. On a rock in this place there is a magnificent tree with thick fruit-pods clinging to the boughs, and containing six to seven black, orange-capped, angular seeds, which are used by the natives in the game of *mangala*.

There were no leaves or flowers to help in determining its species. A hedge of euphorbia encircled the village. We reached Fatíko in pouring rain, and spent another day there.

It was unpleasantly cold in the morning and evening. Besides this, there was rain daily, an occurrence quite abnormal at this time of the year (January 1879), and only to be explained by the enormous evaporation that takes place during the day from the large surfaces flooded by the river, when the midday temperature is 90° to 95° Fahr. in the shade. Therefore it is possible that this year the rainy season is setting in earlier everywhere. From Fatíko a beaten road leads past Fadibék to Tárangole, the capital of the administrative district of Latúka. Unfortunately my time did not allow me to make any excursion to that place, but in order to utilise as much as possible my return journey to Dufilé, I chose a new road, which will now be shortly described.

Behind the mountain Júlu, which lies close to the station Fatíko, and at the foot of which stands Gimóro's village of the same name, we clambered down over blocks of stone, crossed a stream, and found ourselves on very undulating ground, the ridges of which ran for the most part from S.W. to N.E., and which was mostly covered with open wood and high grass. For some distance Jebel Shúa was seen on our right (Linant has placed it much too far north on his map); to the left the mountains of Falōro were clearly visible from the tops of the ridges. As the road cut through the country almost in a straight line we made good progress. We marched along the northern bank of a small *khor*, past a small *zeriba* belonging to the village Fauvel, which lies a little farther to the east, and after crossing some ridges of hills and some streams, we arrived at Khor Unyáma, which here runs from S.S.W. to N.N.E. Icy cold water rushes along over smooth stones in the shadow of high-stemmed trees; north of this place there is but little water, and the little there is is bad.

The road now became terribly monotonous; the path led up and down hill through high grass; twice the Khor Unyáma approached so close to the road that we could plainly hear its murmur. The brooks which crossed the road were for the most part dry; some, however, contained small pools with a

little dirty water covered with reeds, and by one of these puddles we rested at midday. There is no doubt, however, that the soil is full of water, as proved by the fine tall-stemmed Kigelias, and still more by the bushes of date-palms, which always require a wet subsoil. We continued in the same direction, and almost in a straight line, until we met with tolerable drinking water in a deep *khor*, on which account we took up our quarters there for the night.

On the march I was struck by a singular cloud phenomenon. Light patches of haze appeared simultaneously in the clear blue sky, and descending, collected into small round snowy clouds. These remained stationary for a time, then became ragged at the edges, grew more transparent and brighter, and disappeared in the form of mist, leaving the sky once more clear and blue. This display was repeated several times, the wind being south-westerly and the temperature cool (10.35 A.M., 76.1° Fahr.)

The precipitation in the night was so considerable that in the morning everything was wet through, yet by 4.35 A.M. we were again on the way, the road leading straight on. Shivering, the caravan proceeded by the clear light of the full moon; neither porters nor men cared to talk; it was too cold. Besides, we were quite enveloped by high grass, which made it necessary to have our guns always ready, for just about here leopards at any rate are very plentiful. When at last the moon went down, and the purple-red disc of the sun appeared in the east, every one was thankful for the coming warmth; we had, however, gained our point, for we had left behind us a long waterless stretch of ground. The road from Fatíko resembles that by which we reached it. The country consists of terraces; we descended from one plateau to another over level stretches of red clay, in which islands of black soil cropped out. Between two solitary hills a lovely view was disclosed of the long chain of the Mádi mountains, with their numerous peaks. Shortly after, our path joined the old main road, and we halted at Khor-et-Tin, a grey, dirty stream.

On this march I again noticed with admiration the keen sight of my black attendants, one of whom suddenly left us at

full speed, and afterwards returned with a dwarf antelope on his shoulder, a fresh bleeding wound in its belly showing that it had just been killed. How he had noticed it in the grass is a puzzle to me. The animal's companion stood at a little distance from the road, but soon made its escape. This species is trustful and easily tamed, but does not thrive in confinement. As we continued to descend from the *khor*, we frequently came across steep natural walls edging the plateaus, and having in front of them deep hollows. Colonies of termites build their crenelated hills here, being fond of red earth; delicate white or light-blue petunias * grow on the ant-hills. A deep gorge flanked the last descent, down which, by a slight turn, we came to two Mádi villages named Eléma, and then to Khor Dedde, which contains a great deal of water, and empties itself into the Khor Unyáma farther to the north. Some minutes later we rested under the tamarind of Jéifi, where we had passed the night on our outward journey, and from there, after a short march, we reached Dufilé.

7. On Trade and Commerce among the Wagánda and Wanyóro.

COMMERCIAL ACTIVITY—KABRÉGA'S MARKET AN AFRICAN BABEL—ARAB TRADERS—COWRIE SHELLS—THE KING AS A MERCHANT—SLAVES, IVORY, COFFEE, BARK CLOTH, AND SKINS—SALT, IRON, AND MINOR COMMODITIES.

In marked contrast to all the negro tribes inhabiting our territory, the tribes of the Bantu family settled to the north of the equator, namely, the Wagánda and the Wanyóro, have brought commerce to a more advanced state of development, corresponding to their higher civilisation. Whether this progress is entirely due to their own initiative, or whether the trading expeditions of Arab merchants from Zanzibar and the permanent settlement of some of them in these countries,

* Probably a Cynium.—G. S.

has not rather given the first impetus is hard to decide. At any rate, we should not under-estimate the fact that the Bantu are distinguished for their active commercial spirit; and whoever visits the markets of Werahanje in Karágwa, Rubága in Ugánda, and Mpára Nyamóga in Unyóro will find convincing proofs of this fact. The collection at these centres of the most diverse products, and the concourse of types of nearly all the Eastern equatorial races, gives a vivid picture of the natural and industrial resources of these regions, and a clear insight into their commercial relations with one another. A few words on this subject may be of interest.

An extensive square of irregular shape lies close behind Kabréga's large *zeríba;* it is surrounded by luxuriant green banana plantations and the high reed-fences of large groups of huts. Gigantic fig-trees, on the grey, curiously distorted boughs of which whole colonies of grotesque Platyceria have settled, afford shade and coolness when the midday sun is too scorching. Just now a lively, stirring scene is witnessed at this place. People stream thither from all directions; some as sellers, laden with goods or driving before them cattle intended for sale; others as buyers, noisily bargaining with strings of cowries in their hands, or goods for purposes of exchange; the light-brown Wahúma herdsman, with his handsome clear-cut profile and his costume of skins, brings for sale fresh butter neatly wrapped in banana leaves; the deep-black Wichwézi pariah, decked in many-coloured tatters, hung all over with amulets and other curious ornaments, is begging, and extolling his art—he is the gipsy of the country; light-coloured Muscat Arabs, proudly conscious of their colour and superiority, with their hooked dagger, the *shamba*, stuck in the girdle, are not too proud to go marketing themselves, and are buying vegetables, fruits, and meat; their soft-sounding Kisuaheli differs so little from the Kinyóro that they soon make themselves understood; restless, talkative Wagánda, draped in neat tan-coloured bark cloth, have brought for barter the handsome soft mats of Ugánda, together with bark cloths and thick copper wire; short sturdy men from Nkóle are selling in bundles the excellent tobacco grown in their country; the fair-skinned inhabitants of the hill-country

to the south have cattle exposed for sale, and the tall Wákidi warriors, with their towering hair and iron gorgets, look on at the busy scene with indifference. They do not need dress materials, and what they want of iron, copper, glass beads, &c., Kabréga gives them in abundance, in return for the ivory they bring him, it being, no doubt, to his interest to win the favour of these paying customers and secure them for himself. Among the thronging people, crowds of neighbouring villagers push their way and try to find a market for their bananas, sweet potatoes, beans, gourds, Colocasia, and flour; fishermen from the Albert Lake with (so-called) fresh and dried fish, women with enormous gourd-jugs full of foaming beer, male and female beggars, prostitutes, naked children, all scream and shout, and cattle, goats, sheep, and dogs add to the ever-changing confusion. Groups of merry people are assembled around full beer-pots making music, the venal beauties of the country lending hearty assistance. Those who have finished their business and are preparing to go, generally turn into one of the adjacent smithies, which here, as in all Negro countries, are the places of resort for gossip, and among a group of idlers they are sure to hear the latest town and court news to take back to their distant homes. Thus the busy tumult continues till about four o'clock in the afternoon, when the people gradually disperse, and the noise of those that buy and sell is replaced by the barking of dogs and the angry cry of vultures as they fight over their meal, until they too disappear at dusk, and bats and night-jars (*macrodipterix*) commence their ghostly flight in the pale moonlight.

Before the Arabs found their way to Ugánda and Unyóro—leaving out of account a very old Arab settlement in Karágwa—the trade of these countries must have been limited to the barter of articles absolutely necessary to life. The value of the wares offered for sale must naturally, therefore, have depended on the pleasure of the seller and the greater or less need of the buyer, and his means. Money, or a substitute for it, certainly did not exist. But from the moment the first Arabs, Musa Mzuri and Ahmed-ibn-Ibrahim (who is still living in Werahanje), entered Ugánda at the invitation of Mtésa's father, Suna, the state of things was changed. The opening up of the road to Zanzibar, a journey at that time of

about five months by land, opportunities for the sale of ivory and slaves afforded by this route, the settlement of Arabs in the country itself, with agents in Karágwa and Unyamwézi, and subsequently on the lake, influenced, of course, the markets of the country. Quantities of goods, chiefly manufactured articles, woven materials of all kinds, clothes, weapons, ammunition, copper, and brass were brought from Zanzibar, and found ready customers among a people who have a passion for dress and finery as well as for arms. At the same time the need of a currency was created, and the cowrie-shell, named in Kisuaheli *kauri* or *hete*, in Kigánda and Kinyóro *simbi*, was chosen to meet the need.

These shells had long before penetrated into the interior of the continent from the east coast, and passing from tribe to tribe, had been employed in various kinds of worked and ornamental articles. Girdles and head-dresses made of them were valued objects. They are still found among the eastern tribes of the Latúka, Shúli, Lángo, and Wasóga, all of whom slice off the rounded backs of the shells, and fix them on leather or felt, with the cut side outwards, or place the whole shell in the plaits of their high coiffures. But the introduction of cowries as coin among the Negroes was reserved for the Arabs, and the Wagánda were very soon taught this use of them. From that time till the present day cowrie money has been current, and both in Ugánda and Unyóro even small purchases can be made with them. After the backs have been ground off, the shells are threaded in hundreds on a string of bast; five such strings are equivalent to a Maria Theresa thaler, a standard of value fixed by the Arabs themselves, but often subject to slight variations. This coinage answers very well, for large or rather costly articles, and the price is constant; thus, a fat goat costs 1200 to 1500 cowries, a sheep 1000 to 1200, a packet of salt from Unyóro, containing about 4 lbs., 1000, a packet of eleusine corn, also from Unyóro (scarcely any corn is grown in Ugánda), about 400 to 600, an ox 6000 to 7000. The strings are divided into halves of fifty each for objects of smaller value, these again into five parts of ten each, and then comes the smallest division of five pieces. Dried fish cost from 10 to 20, according to their size, a bunch of ordinary bananas

for cooking 40 to 50 cowries. But the large bananas called *gonje*, which are rarer and are eaten raw, cost a cowrie each. The people have become accustomed to this money, by which, except in a few cases of direct barter, all trade is transacted. It may further be remarked that strangers who come to Ugánda without any cowries often find considerable difficulty in procuring a sufficient quantity, for the Arabs, making a wise use of the pressure of circumstances, often refuse to pay in cash. You are therefore frequently compelled to sell the stuffs, red glass beads, clothes, &c., that have been brought with you, in order to procure the necessary coin to meet the daily expenditure for food and housekeeping.

While cowries have become a regular medium of exchange in Ugánda, the same can scarcely be said of Unyóro. Mtésa, the king of Ugánda, would never allow Arabs to go to Unyóro in spite of their repeated requests, being careful of his own interests, and perhaps a little jealous of Kabréga, the ruler of Unyóro, whom he liked to represent as his vassal, especially to strangers and others unacquainted with the real state of affairs. It was much more to his advantage to claim possession of the weapons and ammunition brought into his country by the Arabs, and to send now and then some of his own people with "presents" of cloth, copper, brass, and glass beads to Kabréga, who, in return for his neighbour's Greek gifts, readily sent ivory and slaves, and with these Mtésa made fresh purchases. It was not till quite recently—about five years ago—that two enterprising traders, the Arab, Said-ibn-Seifi, and the Fundi, Hassan, a freedman, succeeded in reaching the capital of Unyóro from Karágwa, where they were well received, and in spite of the system in vogue, reaped a good harvest of ivory. It is the practice in Unyóro, as well as in Ugánda, for every trader on his arrival to present about the half of his goods, especially powder, lead, shot, and guns, to the ruler, who in return places at his disposal a house and garden, and gifts of cattle and fruit, and finally, at his departure, makes him a present of ivory, the value of which usually amounts to five times that of the original present. Both parties make a good thing out of the transaction; the Arab, whose capital brings him a return without any trouble to himself, and the king, who pays nothing for

the ivory, since it is supplied by his faithful subjects. Now, as soon as the Zanzibar trade spread to Unyóro, cowries too were introduced as money, and were readily accepted in the market. The majority of the people, however, has still remained faithful to the system of direct barter, perhaps because the few traders who have hitherto visited Kabréga's residence have brought a proportionately small quantity of wares, and accordingly have had to sell them at a high price. At all events, it is a good sign of the active commercial spirit of the Arabs that they have penetrated so far, while it was a serious mistake in Gordon Pasha's administration of the equatorial provinces of Egypt, that he did not endeavour with all his power to open up these districts to our own trade.

The transport of goods from Zanzibar to the north was naturally followed by a corresponding export trade from the districts between the lakes towards the south. An attempt was first made to take the goods which had been collected in the equatorial districts direct to Zanzibar. It was found, however, that the distance was far too great, even after it had been shortened by crossing the Victoria Lake to Kagéi, and many goods and much time were lost; consequently the centre of the whole Arab commerce with these countries was transferred to Tabóra and the adjacent Uyúi. In these places Arabs have settled, having agents who travel on their behalf and take their wares to the north, where they often stay for years. The Wagánda, too, go themselves to Zanzibar on behalf of their king, and there, supported by Government, they exchange their ivory chiefly for rifles and ammunition. As both Ugánda and Unyóro possess plenty of saleable articles among their varied products, one would readily wish them all success in such enterprises, did not another factor come into play which weighs heavily on the other side.

As I have already mentioned, the Arabs often settle down for years in these equatorial countries, sometimes because the ruler refuses them permission to depart, and sometimes purely for the sake of gain. When visiting one of their settlements, one is struck at first sight by the number of women and girls; male slaves, often tied together in gangs of four or five, are not so numerous, because they have to be transported to a great dis-

tance, and therefore scarcely any profit can be made on them. With girls the case is different; the pretty Wahúma, who are generally of rather light colour and are very handy, are most sought after, while the Wanyóro girls, whose lower incisors have been extracted, are less valued, as also the real Wagánda girls, owing to a universal artificial deformity. While in the year 1876 a girl of ten to twelve years was exchanged for thirty to forty ells (*piks*) of madapolam of the ordinary kind, two years later the price had risen to nearly as much again; but since then it seems to have remained almost stationary. The continual raids made by Mtésa and Kabréga, besides bringing in cattle, ivory, and all sorts of other things, are undertaken for the purpose of procuring female slaves, and all the dealers and caravans passing southwards to Tabóra are well provided with this article. The Wahúma girls play exactly the same *rôle* in the slave-trade here as the Abyssinian girls, whom they resemble in more than one respect, do farther north.

Ivory is still the chief export of the equatorial countries, for hitherto scarcely any attention has been paid to many other products of which I shall speak later on. Ugánda, except in south-western Uddu, is not rich in ivory, as the elephants suffer a good deal in consequence of the dense population. They are much more abundant in Unyóro, especially in its more remote parts, and ivory is therefore to be obtained more cheaply in that country. In both countries one tusk of every elephant slain belongs *de jure* to the ruler, who also possesses the right of buying the other one; he usually, however, does not avail himself of this right, because the second tusk falls to the share of the district chief, who, besides his other payments to the king, is bound to bring him some good pieces of ivory from time to time. The insufficiency of the home production, and the yearly decrease in the spoils of the chase, have long made it necessary to fall back for supplies on the surrounding countries; accordingly, ivory is imported into Ugánda from Usóga and the Wakídi (Lángo) district, and Mtésa is shrewd enough to send frequent missions with presents to the chiefs of these turbulent tribes. Wasóga and Wákidi chiefs, bearing rich presents of ivory, are frequently to be seen at Mtésa's court, where, being perfectly nude, they form a striking con-

trast to the elegantly draped Wagánda. Unyóro, on the other hand, draws a large part of its ivory from the western Lángo districts, where Kabréga's uncle, Naika, rules, and also from the southern frontier lands, and from Lúr, which still acknowledges Kabréga's supremacy. Owing to imprudent measures on the part of the Egyptian Government, all this ivory, instead of following its natural outlet to the north, is still sent to the south. The value of the ivory imported annually into Unyóro and Ugánda can only be approximately estimated; at all events, the complete extinction of this trade in Ugánda from want of ivory is not very far distant, and this holds true to a less extent in regard to the Unyóro trade.

Among the now neglected products which are likely in the future to have a great commercial value, coffee stands first. The coffee-tree, which apparently only differs from that in Yemen by its somewhat larger leaves and more diminutive growth, thrives almost everywhere in Southern Ugánda and Unyóro, and seems to be indigenous. Its name, *muáni*, which is the same in Kigánda and Kinyóro, differs very little from the names used for coffee in other parts of Africa—*mbúni* (Kisuaheli), *mbúna* (Abyssinian), *bunn* (Arabic). Till now coffee can hardly be said to have been cultivated, for all that the natives do is to keep the ground around the invariably small trees free from weeds, otherwise leaving the plant to develop naturally. The fruit, too, receives no particular attention; the pods are gathered when still green, are usually dipped in hot water, and then laid out on mats to dry in the sun. Of course the two berries contained in the pod remain green and undeveloped, but that does not signify, as a decoction is never made from the berries. The dry pods are stored, and generally consumed without further preparation, but sometimes they are very slightly roasted with a small piece of butter. Just as coffee is offered to guests throughout the East, so in Ugánda and Unyóro politeness requires that strangers should be offered a few of these pods to chew, and they are handed round in elegant baskets of open wickerwork. The berries are rather hard for the teeth of a European, and the shell has a strong aromatic taste—in Yemen a very delicious drink is made from it. The natives maintain that chewing coffee-berries

appeases hunger; it might, therefore, perhaps be worth while to ascertain the proportion of cafeine in these unripe beans. The custom also prevails of perfuming the mouth with coffee-pods after free indulgence in *mwénge*. Coffee is in great request as an article of barter between the Bantu tribes, other tribes not having yet used it for this purpose; the price has, nevertheless, remained fairly reasonable, and the exportation of coffee would certainly be profitable.

At the present time bark cloth is a still more important article of barter than coffee among the equatorial tribes. It is obtained from the bark stripped off several kinds of Eurostigma,* and constitutes the ordinary clothing in Ugánda, and that of the better classes in Karágwa, Ruhánda, Unyóro, and Usóga. Hence it is that the production has its principal seat in Ugánda. The price varies considerably, according to the colour and quality of the pieces, and when the material has a pattern on it it is regarded as a fancy article without fixed price. The price of the cloth depends upon whether the tree from which the pieces were taken was stripped for the first time or had previously undergone the process (for strong trees may be peeled three times), whether the material is fine or coarse in texture, more or less durable, and soft or hard in consistency. The cloth is of a light or dark leather-colour, according to the length of time employed in the maceration of the bark; the tint of a perfectly fresh piece is sometimes that of a wheaten roll. Besides this, all undyed bark cloths become darker in wear by a process of oxidation. Of coloured cloths, some are dark grey, and generally worn by Wichwézi sorceresses; others dark red, and worn as a great luxury by wives of very well-to-do people; others again have very neat and regular stripes and spots of black on their leather-yellow ground, and resemble coarse printed calico in pattern and general appearance. This last kind was formerly worn only by royal personages, but in Ugánda, where materials from Zanzibar have superseded bark cloths for royalty, this custom has been given up, though it is still observed in Unyóro and Ruhánda. As a rule, pieces of this kind (*mtóne*) are not to be bought, and to obtain them the ruler or great chiefs must

* *Ficus glumosa*, Del.; *F. fessoglensis*, Ky., &c.—G. S.

be applied to, who are quite willing to supply them in return for adequate presents. The red cloths, for the most part very fine and of a pleasing dark shade, are called *sángo*, and are exchanged for two or three cows a-piece, or their equivalent in cloths. Lastly, the common undyed cloths, called *mbúgu*, are considerably cheaper, and can be purchased in the markets for 300 to 400 cowries. As already mentioned, the preparation of this material is best understood in Ugánda, and the finer kinds are exported from that country to Karágwa, Ruhánda, Unyóro, and the southern highlands, as well as to Usóga and Uámara. The Lúri chiefs also, dwelling on the western shore of the Albert Lake, like to wrap themselves in the flexible cloths of Ugánda and Unyóro, so as to contrast with their subjects, who are either nude or clothed only in skins. They are undoubtedly superior to *rokko*, the cloth prepared in the Nyam-Nyam countries and in Monbuttu from the bark of the Eurostigma; all pieces of *rokko* are coarse and ragged compared with the pliant *mbúgu*, a great deal probably depending on the preparation.

The Wanyóro share with the people of Karágwa their fondness for dressed skins and hides. I do not include among these leopard skins, which are only worn by members of royal families, and a few privileged individuals as a mark of royal favour; nor do I mean the various monkey and cat skins, all of which are employed only as ornaments. Only cow-hides, goat and more rarely sheep skins, and the skins of large antelopes come under the head of clothing properly so called. All these are prepared for use by being stretched out and scraped. If the cow-hides are intended for men's clothes, the hair is left on, the skin being softened, and, as far as possible, the most handsomely marked specimens being selected. Those for women, on the other hand, have the hair taken off the entire surface except round the edge, where a border of two fingers' breadth is left. As long as these hides are new and clean, they look very nice, though not nearly so becoming as the more flexible bark cloths, which drape gracefully. The Wagánda seem to have noticed this, for they are in the habit of elegantly sewing together several goat-skins previously scraped almost as thin as paper, thus forming large pieces,

which, under the name of *buëra*, are sold at a high price, and are a favourite article of dress among the chiefs, being arranged as a mantle over their bark cloths. These leather materials, however, are certainly not durable. Antelope skins of different kinds are used more by the country people, especially for bedding; they prefer the handsomely marked skins, or those with long hair, such as *Tragelaphus scriptus* or *Hydrotragus Spekii*. The skin of an otter (*Lutra*), here called *ngonge*, which is very expensive, and only procured with great trouble, is in great request among the northern Bantu. Of a dark brown colour, it has a peculiarly elegant appearance, owing to the snow-white tips of the hairs, especially on the back of the head, the nape of the neck, and the shoulders. It is said, also, that a man who wears a piece of this skin needs no other aphrodisiac. Strips of the skin are formed into pretty bracelets, and are also a favourite trimming for the gaily painted sandals made of buffalo hide; such bracelets and sandals are also exported to the far south. The skins of *Colobus guereza*, which is not infrequently found in Unyóro and Usóga, are also much prized. The skins are black, with long white hair on the back and a white tuft on the tail, and they are specially used in the decoration of guitars, spear-heads, sheaths, and drums. The beautiful goat-skins of Usóga, which remind one of Angora goats by their long smooth hair, are likewise an article of commerce. The goats from which these skins are procured receive great attention, even in their own country, being protected from rain and dirt, and living specimens are very unwillingly exported.

It is generally known that there is very little salt in these countries; and that the people have to procure it from ashes or even from cow's urine. It is not surprising, therefore, that where it does exist in this region it becomes the object of an extensive and flourishing trade. This is the case with the salt found at Rejaf, which is exported into the district of the Bahr-el-Ghazal, and with that from the eastern shore of the Albert Lake, which supplies the whole country between the lakes to a considerable distance south. The extraction of salt from concentrated lye has been described by Baker; it comes into the market wrapped in banana leaves, in long packets containing four to eight pounds each, and is in particular

request in Ugánda, where a high price is given for it. The salt, which is occasionally imported from Uzinza, owing to the distance and its consequently higher price, cannot compete with that from Unyóro. The latter is usually of a dark grey colour and mixed with dust, but possessing a pure salt taste, and analysis proves it to be almost unadulterated chloride of sodium. In contrast to all other goods, salt, with very rare exceptions, is sold in Ugánda for cash only, that is to say, for cowries. The price of the large packets varies with the quantity that happens to be in the market, although in small packets it is retailed at an almost constant rate. Besides salt, small quantities of fairly pure soda are occasionally brought from Uzinza; it is in great request as a remedy for colic and indigestion, notwithstanding its horrid taste, and is sold in diminutive packets for ten to twenty cowries.

I must here once more refer to iron, of which a very excellent quality is manufactured in all parts of Ugánda and Unyóro, the iron of the former country being softer than that of the latter. It is sometimes obtained from bog iron ore in low-lying lands, but usually from clay ironstone resembling roe or kidneys in its formation, and lying upon the granite. In certain places this ironstone proves extraordinarily rich, *e.g.*, on the mountains round Kisúga, in Unyóro. The iron need not fear comparison with good European kinds.

The plastic clays of the country are most excellent, and are used in the manufacture of pottery, which is as durable as it is elegant, and sold everywhere in these countries at a ridiculously low price. Unlike other tribes, the potters among the northern Bantu are always men, and they manufacture small vessels for milk and for water—the exceptionally large gourd-bottles are preferred to pitchers for large quantities of all kinds of liquids—and their fancy finds free scope in the manufacture of pipe-bowls of the most varied forms, which, in neatness of execution and originality of design, leave nothing to be desired. They are also uncommonly cheap, and are well suited for export.

Besides coffee, these countries yield much fine and excellent produce in resins, fruits, and woods, although no one has hitherto thought of turning them to account. Amongst these must be

enumerated the nutmeg of Ugánda, the aromatic husks of the Xylopia, the spicy seeds of various Amomums, and the wonderfully light and yet firm wood of the *Æschynomene Schimperi*, which is here made into shields. Even the grasses are useful; from the stalks of the Eragrostis the famous mats of Ruhánda are made, with their artistically blended colours, which excite the astonishment of the buyers in the markets of Karágwa and Unyóro. Simpler, but just as beautiful, are the small mats of Ugánda, without which no respectable man leaves his house, for it would be unseemly to sit on the bare ground. The flexibility of the material allows of a mat about six feet long being made into a roll six inches in diameter without breaking the tissue; their strength and durability are also very great.

In the district between the lakes an active trade has been developed; it has been set on foot by external influences, and is promoted by the inhabitants' love of commerce. Intercourse of the different tribes with one another, as well as with the Arab traders, is resulting in constant efforts to open up new trade routes and to create and satisfy fresh wants. The Egyptian territories in the north, however, have remained in these respects very far behind. In spite of our occupation of the northern region, which has now lasted for many years, no progress has been effected, for the unfortunate system of well-guarded frontiers and a monopoly in trade, up till now looked upon as the only protection against kidnapping and slave-dealing, has only prevented the natural development of our countries, and has done little enough to abolish the purchase and sale of slaves.

Whilst in the south civilisation is slowly advancing, and land after land is being opened up to trade, our fertile mountain districts lie fallow, and with folded arms we watch the advance of commerce from south to north, when we ought to be up and doing, and striving continually to open up new routes for ourselves. Would it not, then, be better to break loose from the old Utopian system, to say farewell to philanthropic whims, and to adapt the administration of these fruitful lands to the development of their resources and to the supply of their needs. Should these few words give an impulse in that direction, their object will be more than realised.

II.

BETWEEN THE VICTORIA AND THE ALBERT LAKES.

I. A Visit to the Victoria Lake.

(*February* 13, 1878.)

LANDSCAPE SCENERY—LUXURIANCE OF VEGETATION—BODIES OF THE EXECUTED ON THE SHORES OF THE LAKE—THE MURCHISON CREEK —BOATBUILDING.

After considerable pressure King Mtésa had at last granted me permission to make an excursion to the lake. It was important to set out for our destination as soon as possible, so as to forestall the childish whims of the ruler, in case he changed his mind and forbade my leaving; a small present to the guide assigned to me happily induced him to be remarkably obliging, and we were thus able to set off immediately.

The morning sun was shining dimly through dull clouds; a grey mist was hanging over the country far and wide, above which the ridges of scattered hills appeared like islands, and conspicuous among them was the long range of the table-shaped mountain Mtúndwe. We passed Mtésa's palace and descended into a marshy plain, the passage through which was facilitated by a very primitive dyke, and two still more primitive bridges, made of small logs of wood. On all the hills which we subsequently passed people were industriously employed, new fields and plantations were springing into existence, and bonfires of plucked-up grass sent forth clouds of smoke and the smell of burning. The women were busy digging in the fields, planting sweet potatoes or plucking up the grass; the men were building houses or enlarging and clearing the road, which

here leads evenly over firm ferruginous clay. The red soil is covered by a layer of grey compact clay only in the hollows and on the declivities; the lowest stratum of this clay is free from vegetable detritus, and yields an excellent material for pottery. Near the lake white and yellow sand is found.

As we marched between banana groves and huts, the country looked like a garden, Mother Nature having everywhere filled up the gaps left by man with glorious grass vegetation and graceful slender trees. Impenetrable thickets, the lairs of the leopards, which are very numerous here, at times fringed the road, and one's eye became perfectly dazzled by the sight of so many shapes and colours. The odour of Umbelliferæ mingled with the almost overpowering scent of a Liliaceous plant (Urginea?), which is employed here for making hedges. Groups of Ocymum six feet high were seen, and by a small stream that flows to the lake there were perfect nests of vegetation covering the marshy ground, and often forming galleries along the watercourse. Gigantic trees waved their lofty crowns in the sunlight, and below them, in the deep cool shade, climbing plants of every kind were interwoven. An Amomum with broad waxy leaves grew to a height of ten feet. Calladias, Acanthus, and many Rubiaceæ, although more diminutive, occupied a wider area. Elegant palm bushes shared the ground with splendid ferns (Asplenium), and parasitic plants, probably Angræcum and Platycerium, grew on the branches of sycamores and Spathodeas, so high up that they were beyond reach. Nearer to the lake were isolated specimens of prickly yellow-flowering mimosas.

Thus, artificial and natural gardens constantly alternated, though the former, consisting of bananas and sweet potatoes, could not possibly vie with the latter either in picturesque beauty or variety of species. This is indeed a beautiful, well-favoured land, with its red soil, its green gardens, its lofty mountains, and its dark snug valleys. Nature has profusely lavished her charms, and man alone destroys the harmony of these scenes. Corpses in the middle of the path compelled us to step aside; at our approach the small Ugánda vultures left their ghastly meal with a noisy rush. Four dead bodies were lying there, slain by the hand of the executioner; young and

old lay gathered there; the throat of one was deeply gashed to the very spine, the head of another had been smashed by a heavy blow, and every day, nay, every hour, people pass these corpses, themselves perchance only too soon to meet a like fate.

About half-way to the lake a marsh was situated, which had probably been formed by the overflowing of the lake and by rain. It evidently was to have been bridged over, but as the round logs which had been thrown down for that purpose turned over when stepped upon, it was preferable to wade through the mud. As soon as the adjacent hills were crossed, the lake became visible for the first time; it appeared to be raised above its usual level on account of the thick layer of fog which hung over it. Glimpses of it were frequently obtained between fields and gardens, but we had still more than three and a half miles to march, up hill and down dale, through banana groves, until, after wading through two brooks and climbing a steep hill, the ground suddenly sloped down, and we reached the shores of the lake after a rapid march of four hours.

Usávara, which is the name of both this place and the district surrounding it, consists, like most villages in Ugánda, of huts and *zerîbas* surrounded by banana groves. The steep shore, which for about forty feet is absolutely bare of vegetation, enables the boats to come right up to the landing-stage, and hence Usávara is the usual starting-place for voyages on the lake. At a height of about ten feet above the level of the lake, some detached blocks of rock were lying on the shore, a conglomerate of granitic fragments, and above them a gigantic *mpáfu*-tree (see Cameron's "Across Africa") spread out its majestic crown. At a height of two feet from the ground the tree had a girth of twenty-three feet ten inches. Up to a height of eighty feet its trunk was smooth and free from branches; odoriferous resin flowed from the bark, and nests of parasitic plants were enthroned on its branches.

An extensive view over Murchison Bay opened out here; below our feet lay the lake, rippled by a strong south-east wind; at its edge was a line of yellow coarse-grained sand about a foot in breadth, at the upper border of which dry masses of plants lay in heaps, indicating the high-water level

of the lake; the depth here was insignificant. The bay is enclosed on all sides by mountains, except towards the south and south-east, where an apparently unbounded horizon meets the eye. Well-wooded islands, of which Naluváli (named by Stanley, Bellefond's Island) and two islets are situated at the very outlet of the bay, add to its beauty. The shores also, as far as could be made out from our standpoint, are well wooded, especially those of Koja. A thick girdle of reeds fringes the water's edge almost everywhere, and in the shallows stretches far out into the lake. I saw no papyrus. The Wagánda praise the quality of the water highly, but, owing to the cloudy state of the sky, I was unable to form an opinion as to its colour. In spite of the strong wind, boats containing two or three persons were to be seen plying from shore to shore; one man steers with a shovel-shaped oar, and another paddles. The bows of the boats are curved upwards and ornamented with horns, as well as with outriggers projecting above the water-line on either side, to prevent capsizing.

A little boat lay by chance upon the shore; its planks had been joined together by means of loam and strips of bark cloth; it also had outriggers, but the prow, instead of being turned up, jutted out in the shape of a long triangular beak, probably intended to help in forcing the way through the reeds. The boat was easily managed, but wind and waves prevented our making much progress. Even at a distance of a hundred feet from the shore, the depth of the water appeared considerable, the bottom up to this point consisting of coarse-grained sand, covered with fine grey mud. Crocodiles and hippopotami were numerous, but birds, probably owing to the state of the weather, were not to be seen. I could obtain neither snails nor shells. Fish are dried and sent to the market at Rubāga; there are here fishermen by trade.

Threatening rain and the late hour compelled us to turn homewards sooner than we wished, and on the way a perfect deluge of rain broke over our heads, and obliged us to seek shelter in a village situated not far from the road, for the Wagánda do not like being out in the rain. While we were waiting, the men directed my attention to a trough divided by a partition into two parts, and large enough to hold two men;

they took it for a boat, but it turned out to be a trough for the preparation of banana wine. As the rain was soon over, we were able to proceed; but the road had in the meantime been transformed into a brook. We reached our quarters about sunset.

The aneroid readings were as follows:—

Rubāga, 6 A.M. (start), 63.5° Fahr., 25.65 in.; strong south-east wind, a clouded sky.

Usávara, 10.15 A.M. (thirteen feet above the level of the lake), 70° Fahr., 25.90 in.; strong south-east wind, a clouded sky.

2. From Rubāga to Mrūli.

(*March 22 to April 8, 1878.*)

DIFFICULTIES OF TRANSPORT—IN UGÁNDA NOTHING IS LOST—CHARACTER OF THE SCENERY—A WAHÚMA VILLAGE—PASSAGE OF KHOR ERGUGU—FAVOURABLE RECEPTION IN MRÉKO'S VILLAGE—ACACIA WOODS—CHANGE OF VEGETATION ON THE BORDERS OF UNYÓRO—AUSPICIOUS AND UNLUCKY ANTELOPES—ATTEMPTED HOSTILITIES OF THE WANYÓRO.

When the morning came, my loads, fifty in number, were ready, all of them fairly light and firmly fastened. In spite of royal promises, however, only twelve porters appeared, and it was not till after endless sending backwards and forwards that I had the satisfaction of despatching all my goods, with the exception of fifteen unimportant bales which Matóngali Mukasa promised to send after us to our first night's quarters. Thus I set out, glad to escape with a whole skin from the uncomfortable position into which I had been placed, owing to king Mtésa's suspicions of the Egyptian Government. My ammunition, as well as the loads belonging to the five soldiers who escorted me, were carried by Wanyóro porters, who had come with me from Mrūli and had proved faithful; so, if any of my goods did not turn up, the loss would be my own, and my men would not suffer. All the Arabs living in Rubāga, and the Zanzibar merchants accompanied me for a short distance along the road, firing farewell volleys, which we heartily acknowledged with our sniders. These Arabs are all bloodsuckers if

one enters into business relations with them; otherwise they are courteous and friendly. As my men, owing to our long stay at Rubāga, were out of training, I made the first day's march a short one, and encamped for the night in a large banana wood about two miles to the south of the Kíti mountains, intending there to collect my goods and chattels. By sunset twenty loads had arrived; those, however, which I had sent on in the morning as the least indispensable, such as bedding, cooking utensils, and linen, were all missing. One of Mtésa's messengers arrived, bringing with him the compliments of his master, and a request for rockets, which, of course, I promised to send later on, and begged him to aid me in getting my missing loads, which I would wait for till the following day. I had brought a small number of goats with me from Rubāga, and as bananas were abundant, my men had plenty to eat. The next day we rested, and eight more loads arrived, but what had become of the remainder nobody knew, and Kanagurba, the guide assigned to me, was as disobliging as possible. Late in the evening my *ankareb* arrived.

As I knew from my former experience of Ugánda, that nothing is ever lost there, and that my missing goods would arrive sooner or later, I determined to pursue my way next morning; but I sent Kanagurba back to Rubāga, to try to find my bedding. A rather monotonous march through high grass, occasionally interrupted by plantations, brought us to a group of trees, where, on the bark of a fig-tree, we found the almost obliterated initials of my two predecessors, Colonel Long and E. Linant. From this point many ridges of hills running obliquely across our path had to be crossed; between these ridges there were generally accumulations of rain-water or swamps, which often compelled us to take a circuitous route. The soil is mostly composed of grey clay. We took up our quarters for the night at Buvúma, a little village affording a good view of the high mountains, Bova and Káli, and as no news of our missing goods had arrived, a messenger was sent back to Katíkiro. All round the village a good deal of Voandezia was being cultivated; it is always uniformly coloured red or black, and quickly softens in cooking, whereas the variegated harder species found in the Bari country does not

appear to exist here. An antelope (*Antilope leucotis*) proved a welcome addition to our larder.

Next morning we continued our journey between solid walls of grass, which shut out all view; park land, intercepted by numerous morasses, followed, giving place in its turn to open country, where a broad road is being made over the red clay soil. This road leads to Bukrasa, a pretty, scattered village, where we rested. A splendid view was obtained here of Ugungu, the headquarters of Kangani, towards the lofty mountain of Bova. After passing over a high hill we descended to the brook Kairira, which, on our journey to Rubāga, we had forded farther down, and we refreshed ourselves with its clear icy cold water, which rushes over granite fragments.

Shortly afterwards we reached Briaki, where we were to pass the night, and, to our astonishment, we found there two of our missing loads, but of course not the ones we wanted. After a heavy thunderstorm had passed over us, I employed the time in shooting guinea-fowl in order to provide food for my men. Briaki is situated on the verge of a hill which slopes down into a jungle of reed and grass. Swamps, overgrown with sedges, intercept at places these grassy expanses, and we only very seldom met with cultivated ground upon the road, which, passing by the huts of Gúru, brought us to some outlying houses of the same village. Here we encamped amongst thousands of mosquitos. This district is so thickly populated that there was no chance of sport.

Katíkiro's man came back and told me that all my goods had been sent off from Rubāga, and were on the way, but that where they were was uncertain. He added that Katíkiro had confiscated all Mukasa's wives, as he had been the cause of this confusion. We found quantities of *Phaseolus lunatus* and *P. mungo* in the huts, as well as small stores of dried locusts.

From Gúru the road leads through some mud runnels, but the country is for the most part lightly wooded, and covered with high termite hills. After a time we reached verdant hills, on one of which was situated a small village inhabited by Wahúma herdsmen. A number of dome-shaped huts, which shelter both men and beasts, were surrounded by a high thorn

hedge. The courtyards were excessively dirty, but the huts were kept very clean inside. The inhabitants, who have charge of the king's herds, had fled at our approach, as they were afraid of the plundering Wagánda, but as I entered one of the huts a woman clad in skins offered me milk, with the request that I should drink it out of one of my own vessels. The Wahúma never cultivate the soil, but they exchange milk and butter with their neighbours for sweet potatoes, gourds, tobacco, bark cloth, &c.

Kitára, the village where we were to encamp, was situated a short distance from here. It is small, and belongs to the district of Makóngo Kaségu, whom I visited on my first Ugánda expedition, and who lives about two miles from here; he is, however, too old to pay me a visit. Kapéki, where we passed the night on our outward journey, between Kahúra and Gúru, lies adjacent to Kitára. Along this road there is a bush which frequently grows about six feet high, and has woolly verbena-like leaves and blue blossoms like those of the salvia; the whole plant exhales a most pleasant perfume.* At 5 P.M. a man unexpectedly arrived with my bedding. Anyone who has slept in Central Africa for five nights on a bare *ankareb*, and has had some experience of our mosquitos, will readily realise my joy; my only goods now missing were the linen, cooking utensils, and my store of coffee! The following morning a very short march brought us to Khor Ergugu; we passed through fine park land, where on the short turf we noticed some Pentastemon,† blue Lathyrus, white convolvulus, and dark red and silver white Malvæ, with bright red eyes. The first part of Khor Ergugu was quickly passed, as the water was only knee-deep and no grass was growing in it. The second part proved more difficult, as the water was now breast-high, and enormous quantities of grass prevented us from gaining a firm footing, so we took fully twenty minutes to wade through it. A quarter of an hour's march through a fine wood brought us at last to Mréko's headquarters, Kahúra.

In order to enlarge his house, Mréko, a younger brother of Nyamásore (the queen-mother), had caused all ornamental trees

* This bush is probably a species of Coleus.—G. S.
† This genus does not exist in Central Africa.—G. S.

which had adorned his estate to be cut down, so the chief charm of the landscape now consists of an enormous straw fence ten feet high, which surrounds Mréko's huts! He himself, an old acquaintance, came at once to welcome me, assigned us houses, loaded us with sweet potatoes and bananas, and, at my request, immediately sent off some of his people to inquire after my missing loads. In two hours I received nearly all of them, and before sunset I was in happy possession of them all. The manioc plants I had brought with me had not suffered, but the little coffee-trees were withered. The inhabitants of the village, who knew me of old, brought me small presents of bananas, eggs, and sweet potatoes, so that we could hold high festival that day. As I was to be provided with fresh porters here, three days slipped by, as I had foreseen they would, before we could even dream of collecting the men. I utilised the hours which were free from rain by hunting and collecting, for both of which pursuits this district is exceptionally well suited. A visit to Mréko's hut, a nocturnal expedition, during which a quantity of beautiful white honey was obtained from a hollow tree, and the arrival of messengers from Mtésa bearing curious letters from him, made the time pass quickly. One of my Wanyóro porters disappeared soon after my arrival; his relations are said to live in the neighbourhood, and it was generally believed that he ran away to join them, but I did not believe this story.

At last, on Monday, Mréko's big drum brought the porters together, and half an hour later we were on our way, this time in possession of all our luggage. Shortly before our departure, Matóngali Kasamiríri arrived from Rubāga with friendly letters from Hamis-ben-Halfán and Mesaud-ben-Salimin, chiefs of the Zanzibar colony in Ugánda. Many sweet-scented mimosas, with splendid red blossoms, and quantities of euphorbias grew on the low grass, but the day's journey was again impeded by much water and mud. Real acacia woods are to be found here, which, on account of their light foliage and their many bare branches full of white thorns, appeared from a distance as if shrouded in mist.

The miserable little village of Demba, quite close to Mréko's *zeríba*, was chosen for our halting-place, in order to give the

Wagánda porters an opportunity of returning once more to their huts, and of completing the preparations for their journey. As I had obtained possession of a large number of cattle in Mréko's district, all my men, as well as the Wagánda, fared exceedingly well, being provided with enormous rations of meat. It is the custom both in Ugánda and also in Unyóro, for the head of an ox, slaughtered on the journey, to fall to the share of the drummer who invariably precedes the caravan. Another day was wasted in Demba, as news from Mtésa was expected. My missing Wanyóro porter turned up again safe and sound, which was a good thing, for we were now on the frontier of Kabréga's territory, and his people are hostile. This was proved by an attack on our porters who went to fetch water, and only escaped by the intervention of their comrades. The huts here swarm with small grey ticks (in Kigánda and Kinyóro, *bibbo*), which are much dreaded by the natives; they are also very numerous in Mrūli.

As the expected letters did not arrive, we started early the next morning, our road leading us over damp black mould. A very striking change is noticeable in the vegetation here; the tender green plants, abounding in sap, had been left behind, and we entered upon a region of stiff-leaved, hard-wooded plants, of which more than half are Leguminosæ. Owing to the fires, most of the trees were crippled. A great many red ant-hills appeared here on the grey soil, which perhaps for nine months of the year is under water (the whole of this district is inundated by Khor Ergugu). A fine buck (*Tragelaphus scriptus*) sprang up quite near us and crossed our path; this is said to forebode good luck, whilst if a buffalo or a dwarf antelope crossed the way it would bode ill. Small cultivated patches indicated the neighbourhood of a village, which indeed we soon reached; it is called Súgara. The inhabitants, Kabréga's people, only reluctantly provided us with huts; they even declined to lend us waterpots, although we offered them presents; they subsequently entirely evacuated the place.

At about eight o'clock in the evening shots were fired, and a great din arose in the direction of Mréko's camp, which was situated at a distance of about ten minutes from us. The Wanyóro had attacked him! Leaving my men to watch the

loads, I hastened thither, but when I arrived I found that quiet had been restored, for the shots had frightened the Wanyóro, who were only armed with spears. Mréko had been sitting with Kanagurba drinking banana wine, when suddenly about twenty men sprang out from the grass, throwing spears, without, however, doing any harm.

On account of light rain in the morning the porters could scarcely be persuaded to move. Beautiful undulating park land, with here and there water puddles, stretched on all sides, until, after a three hours' march, we reached a deserted banana wood called Gumrisi, where our leaders decided to halt for the day. I had noticed on the way many tamarind-trees, a sign that we were going northwards. Mtésa's long-expected messengers arrived at last, bringing me a letter from him saying that Kanagurba was to accompany me to Khartúm. I was not greatly rejoiced at that, for Kanagurba is a very cross-grained individual.

The next morning Mréko and his people were stirring very early—they always camp apart from us—a sure sign that a long march awaited us. The country we traversed is considerably depressed below the general level, and bears distinct traces of frequent inundations. Hills and park land were varied by very small fields. After crossing some high hills, we rested for a few minutes by some rounded blocks of granite which were lying in the way, and then pushing vigorously on, in five hours and a half (the best march of the journey) we encamped at Kiótosi (Speke's Kiratosi). I had scarcely built my straw hut, when Mréko came to inform me that the next day we were to rest; but, as I was afraid he wished to make reprisals for the attack of the day before yesterday, I tried to induce him to proceed, and after much persuasion succeeded. In the meantime one of my Wanyóro porters, who had straggled, had been seized by Kabréga's people and robbed of his load, but the Wagánda, who had joined us, pursued them, and we recaptured the load, from which little was missing. The country slopes gently down from here to Khor Ergugu. I have described the crossing of the *khor* before; this time it was successfully accomplished in an hour and a quarter, but there was not so much grass growing as at the point where we crossed previously; unfortunately

my grey parrots were drowned here through the carelessness of the porter. Immediately after passing the *khor* we reached our huts, but were tormented all night by millions of mosquitos, and rejoiced when we left our tormentors behind us. The stretch of country which lay before us, with its monotonous woods and grass jungle, has been described before; sufficient to say, that I was thankful when, after a frightfully fatiguing march, our huts were built in the afternoon at Btuti, whence, on the following day, we continued our journey to Mrūli.

3. From Mrūli *viâ* Fauvera to Magúngo.

(*April* 13 *to* 28, 1878.)

ON THE NILE TO FAUVERA—AT ANFĪNA'S—NEW SCENERY—A TRIP ON THE NILE NEAR FAUVERA—CONFIGURATION OF THE SOMERSET NILE—CHARACTER OF VEGETATION ON THE BANKS OF THE RIVER—AGRICULTURE AT FAUVERA—A MARCH THROUGH A SEA OF GRASS—WITH ANFĪNA, THE ONLY GENTLEMAN—ANOTHER SEA OF GRASS—FORD OF KHOR VARINGO—MANY MEN DOWN WITH FEVER.

As I had already traversed the road from Mrūli to Fauvera by land, I chose to go this time by water. I sent my goods and the two soldiers (who had accompanied me to Ugánda, and who now requested permission to go with me to Ladó) on in advance in a large native canoe, but soon caught them up in a light European boat propelled by two sturdy rowers. The mighty stream winds in curious curves between papyrus masses often twelve feet high; its current is only made apparent by the Pistias which float along near its banks. At first, the northern bank of the river is covered by beautiful mimosas, but soon their place is taken by whole woods of doléb palms; these palms are much smaller here than in the Shíluk country, but their foliage is much denser, which fact is probably to be ascribed to the difference of humidity in the atmosphere. Tamarinds are also common here. The water has a yellowish-green tint, and is hidden in many places by masses of floating

Pistias. Crocodiles and hippopotami were seen here in great numbers. We had hardly been half an hour upon our voyage, when our light boat flew nearly half out of the water; an enormous head popping up close by showed us whom we had to thank for the blow. The prospect of being thrown by a sportive hippo down the throat of a crocodile is not pleasant. Solitary mountain peaks were visible towards the south; the southern bank of the river is covered by light wood, but the papyrus fringe is all the more formidable. Our voyage continued without further incident; the light morning rain passed off, but the sky remained clouded.

After a short rest on the bank, here rising to the exceptional height of twenty feet, where a brood of *Cercopithecus griseoviridis* was noisily gambolling, we continued our voyage, much enjoying the splendid effect which the dying glow of the sun, the variegated tints of the evening, and the pale light of the moon produced on the dark water, over which we glided noiselessly along under the shadow of dark papyrus walls. About an hour after sunset we arrived at Koch (Koki), where latterly an agricultural station has been established, and promises well. My night's quarters were soon arranged, as I had brought all necessaries with me, and, owing to the foresight of the soldiers, I even had sweet potatoes roasted in the ashes for my supper. About midnight another boat arrived, the occupants of which were all suffering from fever; notwithstanding this, I despatched their boat early, in order to give them the benefit of the cool morning hours, whilst I started later on, after a visit from my old friend Riónga, well known to the readers of Baker's books.

The river scenery continued much like that previously described. Wide stretches of floating turf, consisting of Pistia, Vallisneria, Ottelia, Potamogeton, &c., edge the papyrus growth. On the land gigantic primeval trees are so thickly interwoven by climbing plants that they present a front of smooth foliage. Without an axe it is impossible to penetrate these woods, and they are haunted by leopards and beautifully marked pythons.

We landed, after a short voyage, on the high banks near the station of Fauvera, which, owing to its bananas and fields, makes a fine show. My floating hospital arrived somewhat

later. I was compelled to rest here for a few days until porters arrived and my patients improved. The soil at Fauvera consists of a white sand mixed with a yellowish clay, in which sweet potatoes, durrah, and especially maize thrive splendidly. I left here, for experimental purposes, white peas from Karágwa, and seeds of *Carica papaya* from Ugánda, and I shall send wheat from Khartúm. The vegetation here is very luxuriant, but my stay was unfortunately spoilt by the numerous mosquitos, and still more by the frogs. The latter are found in the river in great numbers, as also large *Protopterus annectens* (Owen).

Rows of hills run obliquely across the extensive park land, which stretches out on the other side of Fauvera as far as Deáng, our first halting-place on the road to Kiróto. Here and there the whole wealth of African vegetation unfolded itself, but human beings were nowhere to be seen. The little village of Deáng is surrounded by a thin wood, in which masses of the red blossoms of the *Canna indica* are to be seen, as well as aloes and red passion flowers.

The next part of the route, from Deáng to Kijaja, where Riónga's people received us kindly, can only be described as a perfect sea of grass. These marches through the grass are very laborious, as one has literally to cut one's way through, especially when travelling with sick men, as we were. White Crinum filled the air with its odour; it thrives best under the shade of high trees. We were only able to make very short marches, for the men could hardly walk, and I had no riding animals for them; I was therefore compelled to halt next at Anfīna's *zeríba*, Panyatoli, which lay a little to the north-west. There we met Anfīna himself, and he again confirmed the good impression which he has always made upon me. He is the only Negro gentleman whom I have met with during four years' journeys in this territory, Mtésa not excepted. Among the spectators who crowded round us were several Wichwézi sorceresses, who are to be found in the household of every independent chief; their appearance is most striking, owing to their long curls of hair entwined with coloured cotton threads and their bead ornaments. The people are mostly clad in skins, but bark cloths are also to be seen.

In Ugánda the latter are chiefly worn; in Unyóro and Usóga the former. The huts are large, roomy, and, like all Unyóro huts, dome-shaped, but without pinnacles; in the inside they are divided into two parts. I slept in a somewhat larger square hut, and quite a crowd of people wanted to take up their quarters with me; it cost me ever so much trouble to make them understand that their company was not desired. When milked, the cow's udders are washed with urine. In the enclosure big liver-coloured dogs were running about, and a large he-goat (it measured twenty-five inches at the withers). This goat seemed to be a privileged animal, for it was allowed to knock people down with impunity.

Beyond this place the country became more and more hilly, the ridges of the hills being covered with high grass, and the swampy valleys overgrown with date palms; the doléb palm is never seen. It appears to be very uncertain in the choice of its habitat. We pressed on through the high grass with great difficulty, being scratched and pricked on all sides, so that, after a three hours' march, we joyfully greeted the little village of Kituanga, where tolerable drinking-water was obtained. The few huts adjoined a neglected banana grove, and were surrounded by small fields of durrah and sweet potatoes. Thence a stiff march brought us to the village of Kokmiria, where was some water lying between granite and gneiss ledges.

As a long march lay before us, we broke up our camp early. There is not much to be said about these marches, for the scenery was almost invariably the same. It consisted of high grass, thin woods, and low swampy ground. Jebel Geisi was visible for a moment through the grass, when the sun had dispersed the morning mist. Crossing several watercourses, one of which was fringed by a splendid wood, we arrived about midday at our station of Kiróto. This station has been previously described. On the road I noticed upon a number of fig-trees quantities of broad-leaved pseudo-parasitic plants (Platycerium?), just like those I had previously observed in Kabréga's district. Owing to the persistent rain, I was unable to utilise my stay at Kiróto for making collections, although it abounds in material.

After a day's stay at Kiróto we turned back towards

Magúngo, choosing a road to the north of that by which we previously travelled. At Magúngo the steamer *Nyanza* was to await us. A very steep road leads from Kiróto to Khor Varingo, and is rendered the more laborious by the numerous little watercourses which run across it, and the large reed thickets. The strong current of the muddy *khor*—the same we had previously passed lower down—reached up to our knees. Leaving, to the left, a little village, we passed on through park land to another *khor*, the bed of which lay at a considerable depth, and its water reached up to our waists. We halted for the night at Kúbia, and hastened to erect our huts, for the rain threatened. The rain always seems to travel with us. In Kabréga's territory, in Ugánda, and here too, we experienced incessant rain, and, to add to our discomfort, this time all my men were ill. Marching in the cool of the morning is very pleasant, but generally involves a cold bath, because the abundant dew on the long grass comes down in showers upon the traveller. Upon this occasion there followed a bath proper as we waded knee-deep across the numerous watercourses.

The gentle descent towards Magúngo began here, although it was as yet imperceptible. We passed the night at Kangara, where one of my men fell ill with smallpox, and the next morning we crossed the ridge of hills which runs across the road, and from the summits of which a good view is afforded of isolated mountains lying towards the south-west. A small village called Fejau lay at the base of the hills opposite. We passed it rapidly, in order to prevent the porters from plundering the deserted huts. I was, however, compelled to remain the night at Usonda, not much farther on, as my patients could hold up no longer.

A sharp march of three hours over very hard red clay soil was next accomplished. The condition of the ground proved that the *kharīf*, with its rain, had not yet reached this district, but the blooming Terminalias and Combretas indicated its near approach. A pool in which we had hoped to find some water only contained a little mud. One more ascent and we saw at last the mountains on the western shorès of the Albert Lake and its shining waters. From this point the slope of

the ground was very perceptible. Our proximity to the water was indicated by doléb palms and Calotropis. Another hour's march brought us to the village of Blígi, where the people were obliging enough to bring us the longed-for water. After permitting the men a short rest, we again started, and in half an hour arrived at Magúngo; so Magúngo is at the beginning and the end of these few notes.

4. An Excursion to Lúr, on the Western Shore of the Albert Lake.

MOUNTAIN SYSTEM NEAR DUFILÉ—THE MANUFACTURE OF SALT—HUTS FOR GHOSTS—FOUNDATION OF THE STATION OF WÁDELAI—DRESS OF THE ALÚR (KOCHE)—WILD WATER-MELONS—THE FAUNA OF MAGÚNGO—MESSENGERS FROM MTÉSA—CROSSING THE LAKE—THE COUNTRY NEAR MAHAGI—ARCHITECTURE IN THE LÚR COUNTRY—HOUSEHOLD UTENSILS—MAGIC ALOES—OCCUPATION OF THE WOMEN—AGRICULTURE—GOATS AND SHEEP—MIGRATION OF THE SHÍLUK TRIBES TO THE LAKE—DIVISIONS OF THE LÚR COUNTRY—THE COUNTRY OF THE WEST OF LÚR—THE DISTRICT BETWEEN MAHAGI AND WÁDELAI—A CURIOUS BREED OF GOATS—MOUNTAINS BEHIND MAHAGI—THE ALÚR OF MAHAGI—THEIR CUSTOMS AND DRESS—ARMS—THE FAUNA OF MAHAGI.

Although the season was far advanced (November 1879), the river was still high when we steamed southwards in the *Khedive*. The steamer was put together by Sir S. Baker's engineers at Gondokóro; afterwards it was taken to pieces again and transported overland to Dufilé, where it was rebuilt. The mountain masses of Jebel Kuku and Meto approached so near to the western bank of the river just south of Dufilé that their position in regard to each other was distinctly seen. Two almost parallel ranges run from the Niambara mountains; the foremost range is known by the name of Jebel Nyefo just behind Kíri, but near Muggi it receives the name of Nyiri, and from there, flanking the road which runs to the south, it ends near Dufilé, where it is called Jebel Kuku. The other ridge, of which the northern part is as yet unexplored, appears

to form the western boundary of Fajelu, and also ends near Dufilé, where it is called Jebel Meto. The transverse valley lying between these ridges is inhabited in its southern and western parts by Mádi, who till the soil, whilst Bari, who are rich in herds, occupy the north-east.

Floating grass and reeds indicated rain in the south, while frequent thunder and lightning in the east and south-east confirmed the fact. A prolonged stay, in order to ship men and gather wood, gave me time for short excursions on the east river-bank below Bora; the Mádi villages were, however, very isolated, and scarcely any information could be obtained from the shy natives. My ornithological spoils, however, proved important, for, in addition to *Lobivanellus senegalensis* and a bee-eater (*Merops Bullockii*), I obtained a fly-catcher and an undetermined species of Thamnolæa. Siluroids were the only fishes I found.

Cold and misty weather somewhat retarded our departure. Soon, however, the sun broke through the thick mist, and the villages nestling between green fields in the folds of the hills, from which columns of smoke rose into the sky, formed, together with occasional stretches of wood, a very attractive scene. Salt, which is otherwise very rare in the Mádi and Shíluk districts, is obtained everywhere from the ashes of dried grass which is heaped up and burned. A species of yellow sand is found in many places near Dufilé; it has a strongly alkaline taste, and from it also salt is obtained by washing and evaporation, but owing to its sharp and bitter taste it is not much liked.

After passing Bora, where last year's floods had done much damage, we found that the almost impassable grass barrier which had existed in the river had been swept away. Thus, we reached Wádelai's district at 2.45 P.M. A new station is to be founded there, if the chief gives his permission. The length of time occupied by our journey from Dufilé to Wádelai, deducting all delays, was thirty-one hours fifteen minutes, but as our speed was very irregular, the exact distance could not be ascertained. A low ridge of hills runs close by the river; from the top of it we obtained a view of an extensive undulating plain, slightly rising towards the west, in which small *zeríbas*

were scattered, surrounded by banana groves and numerous plantations of sesame and sweet potatoes. The whole country has a very homely look, and this impression is enhanced by the obliging and kindly manners of the inhabitants. As Wádelai's village is situated at some distance from here, we had to wait until messengers had been sent to him. The river, dotted over by many reed islands, is very broad. On the east bank a herd of thirty or forty elephants was peacefully grazing, and here there was a broad fringe of rushes. Close by the bank the depth of the water is 11½ feet; a little farther, about 48 feet. Sounding showed that the bottom of the river was composed of thick grey clay, containing large quantities of vegetable detritus and a great number of small snails; we collected specimens of the latter.

In the meantime a brisk traffic had sprung up on the bank, wood for the steamer, sweet potatoes, gourds, bananas, and fowls being exchanged for glass beads. We visited the little villages without hindrance. They consist of compounds containing ten or twelve small dome-shaped huts with porched entrances, which latter are often seen in Unyóro. Very clean receptacles for corn, covered and calked with red clay, and with a raised handle on either side, stand on wooden frames between the huts. Several miniature huts are dedicated to the spirits, but stand empty. In the centre of the village a small roof raised on posts marks a grave where the blood of a goat is occasionally offered to the dead. Frames for drying sesame were heavily laden with bundles of it. The country is adorned by many high trees, which shelter a large number of birds; among them I noticed the goshawk (*Astur polyzonus*), *Spizaëtus occipitalis*, another yellowish brown hawk, sunbirds (*Nectarinia pulchella*), the common widow-bird, still in full feather, many weaver-birds, and a species of pipit. A messenger from the chief came late in the evening with a large tusk of ivory as a present. He was commissioned to inquire whether my intentions were good or bad, and having been sufficiently enlightened on this point, he returned with presents both for the chief and for himself.

The mornings at this season of the year are very misty. It was only to-day (November 17) that I was able to take a sight

of the sun; it gave 109.5°. Gimoro, "the right" or foster brother of chief Wádelai, arrived to visit me, accompanied by 300 Negroes, and he also brought me a tusk. He is a strong, intelligent-looking man. Green tendrils were twined round his smoothly shorn head; his arms were covered with beautiful iron ornaments, and his dress consisted of goat-skins hung from the shoulder. After he had received presents of beads, cloth, and copper, he told me that Wádelai himself was unable to come because he was too stout to walk. The *kuftan* I had sent him on the previous evening was too tight, for, said he, "when he sits a child could stand upon his paunch." A long palaver with him led to a satisfactory conclusion, and I received permission to form a station here, after promising to keep my soldiers well in hand. Whilst the people acceded to my request to bring wood for the steamer, I had an opportunity of inspecting them closely. The whole district of Wádelai is called Koche. This is pronounced by the Shúli and Wanyóro Koshe, which has led to the word Koshi figuring on Baker's map.

This district forms one of the many subdivisions of the large country of Lúr or Alúr, which, from the southern boundary of the Mádi district, stretches to an unknown distance towards the south, whilst the Bahr-el-Jebel and the Albert Lake form its eastern boundary, and Lúbari, as well as a number of entirely unknown countries, such as Léndu, border it on the west. The language of the Wádelai, or rather the Koche tribe, is the Alúri, probably a dialect of the Shúli. I shall have an opportunity of discussing the country and language later on. The people are a handsome race, mostly of middle height, in colour black, with a reddish-brown tinge, and they have beautiful teeth and small feet. They wear the hides and skins of oxen and goats, and sometimes those of dwarf antelopes; these are fastened over the right shoulder. Bark cloths brought from Unyóro are only rarely seen. Though little attention is paid to dress (the skins worn were mostly torn), great care is expended on ornaments and painting. All kinds of frisures obtain; the wigs and cowrie head-dresses of the eastern Shúli district, the towering head-dresses of the western Lángo, as well as spiral tresses and corkscrew curls. Many I saw had dyed

their hair dark red. The painting was still more grotesque. One belle had painted her legs grey, with red stripes, and placed on each cheek a bright red spot. The lower lips were pierced, and generally contained a long straw stalk. The following ornaments were noted: iron ornaments of all kinds (iron beads excepted), ivory rings, necklaces of teeth, long conical brass ear-rings, and half-moons made of brass. Gorgets appear to be very popular, wide at the bottom, narrowing at the top; brass and copper seem to be rare. I could, of course, learn little about habits and customs during so short a stay.

Considerable intercourse exists between the Shúli on the eastern bank of the Nile and the people here. Fatíko can be reached from here *viâ* Fagáki and Fábo in three days. A march of six or seven days to the west leads to Lúbari, beyond which lies Kaliká. It is said that a large river exists in the south-west, but no one has seen it; branches from the Bahr-el-Jebel to the west certainly do not exist. Our stay here was unfortunately too short — only a few hours—to allow of excursions. The enormous number of flies was remarkable; they appeared to be the common house-flies, and in the evenings heaps of greenish flies could be swept together on deck.

At ten A.M. the aneroid marked 27.70 in. (temp. 87.5° Fahr.) Somewhat later we continued our journey. From this point the voyage was less impeded by floating vegetation, and the accumulation of reeds near the bank disappeared; we passed many villages. Hippopotami are rarer than they are farther to the north, probably on account of the deep water. The only birds I saw were the heron, which abounds everywhere, the darter, and the cormorant; the pied kingfisher (*Ceryle rudis*), generally so common, becomes scarce towards the south. After a slow voyage of five hours seventeen minutes, against a very strong current, we anchored near the foot of a chain of hills, in order to visit another chief. Unfortunately, after we had climbed the hills to his village, which is situated behind them, all the people had fled, so a dragoman had to be sent to them as an ambassador. *Murhakkas* (grindstones) and talabún, ready to be ground, lay before each of the ten small huts which I found here, besides which I noticed quantities of water-

melons, which grow here in great abundance, small patches of ground covered with a species of Gynandropsis, many sweet potatoes, and sesame. All the huts were divided by a partition into two rooms. After we had persuaded one of the fugitives to return, he promised to call his chief. The language, dress, and arms of these people are exactly identical with those in Wádelai's country. This district is called Farokéto. To Kōche is said to be a distance of six or seven hours, to Mahagi eight hours. Next morning Chief Rokéto sent us a refusal; he was offended at our not having gone direct to him.

We continued our journey early, hugging the western bank, on which many villages lie scattered, and where euphorbias grow in remarkable quantities. The pressure of the current seems to wear away the eastern bank very rapidly, for on the western bank long stretches of fresh alluvial soil lie bare, on which vegetation is only just beginning to take root. It is very remarkable that neither geese nor ducks are to be met with in this district; on the other hand, numerous herds of antelope abound (*Antilope ellipsiprymna* and *A. senegalensis*). Over the lake itself, which we soon reached, a little sterna flew, unfortunately beyond our reach. The osprey (*Haliætus vocifer*) is one of the commonest and prettiest birds in this region.

We reached Magúngo, where we are to make a longer stay, at 2.40 P.M. Our voyage from Dufilé to Magúngo occupied thirty-one hours fifty-eight minutes, which tallies well with former journeys of thirty-five hours and thirty-four hours forty-six minutes. If we reckon an average rate of four miles an hour, the distance would be about 128 miles. Four hours twenty-eight minutes were occupied in steaming from Farokéto to Magúngo, on account of the strong current. The aneroid read on the lake 27.62 in. (88° Fahr.), on our arrival at Magúngo 27.56 in. (90.5° Fahr.) I devoted my stay at Magúngo as far as possible to making collections, though the want of ammunition and spirit for preserving specimens, as well as other necessary articles—owing to the block in the river we had been for nearly two years without communication with Khartúm—and also the lack of writing-paper, somewhat frustrated my labours; many valuable and beautiful things, however, were brought together. The *zeríba* placed at my disposal lay outside the

station. It contained a splendid sycamore, the thick foliage of which harboured numerous creatures. Besides the birds which were brooding there (*Spermestes cucullatus* and sweet-voiced grosbeaks, *Crithagra musica*), tree snakes, often over three feet in length, and up to eighteen inches in girth, were crawling about, as well as chameleons. In the enclosure, wagtails (*Motacilla flava*, var. *griseocapilla*, and *M. vidua*) were singing persistently, and making war upon one another. Adders were also numerous; a specimen we caught measured six feet in length and four inches in girth. All the woodwork was covered with a species of blue-and-white-striped Cerambyx. Several wounded males bore testimony to violent encounters with one another. I caught numerous insects, chiefly Lamellicornias, and *Oryctes nasicornis*, apparently a cosmopolitan, was very common. In a series of pools close by the river, scorpions were swimming about—Nectodonts, Dytiscus, and lower forms—but unfortunately, owing to the want of preserving fluid, they had to be left where they were.

The neighbouring wood yielded a rich collection of birds, and many new specimens, as far as East Africa, at least, is concerned, may be found amongst them. There too I succeeded, to my great joy, in finding a colony of magnificent *Coryphegnathus albifrons*, and I took its nest and eggs. Some years this bird is common at Ladó, as the many specimens I have collected prove; in other years it entirely disappears. I also procured the nest and fledgelings of a barbet (*Pogonorhynchus bidentatus*) from a high tree, while swarms of weaver-birds were absolutely innumerable, and five species enriched my collection.

An excursion to Kiróto took up several days without yielding any zoological results, although some ethnological objects were obtained. The first thunderstorm was recorded on December 6th; it was preceded by a strong S.S.W. wind; shortly before it broke over us the aneroid rose to 27.66 in.

The arrival of a party of Wagánda, who brought me presents from King Mtésa and his prime minister, Katíkiro, as well as letters from them, from the Arabs, and from the French and English missionaries residing in that country, was a very pleasant diversion. As a funny incident, I may mention that,

in answer to a written request to send me pots containing a few coffee-plants, Mtésa forwarded a bundle of dry branches four to six feet in length. In conversation with the men, the name of Musaba was mentioned as denoting the land to the north-east of Ugánda; I had previously heard this name, but I am unable to identify it, unless it be the Masába to the south-east of Mrūli.

After concluding my official duties at Magúngo, where a number of meteorological and hypsometrical observations were made, it was time to think of our departure. A comparison of the compass on land and on the steamer showed a great difference; the reading on the land gave 344° (N. being 360°); that on the steamer was 159°; so that this difference must be taken into account in the construction of the map.

A violent thunderstorm delayed our departure, but at 6.43 A.M. the steamer *Khedive* carried us towards the lake. As a rule, the passage across the lake to Mahagi is made after midnight, as from 9 A.M. strong breezes from the S. and S.S.W. sweep over the lake. Following a nearly westerly direction, we quickly steamed beyond the river proper, which has been very well described by Colonel Mason. At 7.10 A.M. we passed the doléb palms which form a landmark here, and then for some time hugged the land to the N.W., on account of the strong wind. We then shaped our course to the S.S.W., towards the mountains, and then parallel to them. During the first part of our journey, the level tract extending for half a mile to one mile and a half to the foot of the hills is overgrown with grass and some few trees, but farther on it is covered in parts by beautiful woods, and many large villages are seen near to each other. The lake was rather rough, and its water of a dark sea-green colour. We only noticed a few swifts and darters; much floating Pistia was being driven by the wind from the south; the eastern shore was entirely hidden by mist. At 10.55 A.M. we reached our station, Mahagi, which is not situated on the point designated by Colonel Mason Mahagi, but three and a half or four hours farther to the north, and is, properly speaking, misnamed, as Mahagi is really the name of a village to the south. The landing was somewhat difficult, owing to shallow water. When sailing along the

western shore the soundings only gave us fifteen to twenty feet; they proved that the bottom is mostly covered with deep black vegetable mould, whilst here it is of a very tough reddish clay. The voyage from Magúngo to this place occupied four hours nine minutes, of which twenty-eight minutes were required between Magúngo and the doléb palms, that is to say, on the river proper. On leaving Magúngo the aneroid read 27.62 in. (temp. 72° Fahr.) Here it gave 27.56 in. (75.1° Fahr.) The little station of Mahagi is surrounded by luxuriant cornfields; behind it rise steep high mountains in a long chain, having on the whole a direction from N.E. to S.W. The high Jebel-Erúku closes the panorama towards the south, whilst towards the east the mist-covered lake appeared to have no bounds. What lies towards the west behind the mountains is only known from native reports.

Toa, a large village belonging to Chief Sonda, lies near the station, and thither my first excursion was directed. The huts are built as in Unyóro, by constructing an almost dome-shaped skeleton of pliable branches and rods. This is supported from within by a number of straight posts, generally standing in rows, and the front part is raised and arched over, forming a porch. The whole is then covered with a thick layer of long grass, coming down to the ground. These huts, if large enough, leave nothing to be desired as regards neatness, comfort, and coolness; they can be divided into separate compartments by reed walls, and furnished with sleeping-places, &c. The fire-place is almost always in the middle; the bed for the master of the house is placed in a corner, a kind of fixed bedstead being made, of short posts, with cross pieces of wood, over which are spread hides and bark cloths. Gourd vessels of all shapes and dimensions, black earthen vessels of a round and usually hemispherical form, and mats of straw and bast form the only furniture. Here and there bundles of seed, tobacco, and pulse are hung up, neatly wrapped in broad leaves. Beside the chief's huts, which are distinguished by their greater size and a smooth level fore-court for dancing, made of cow-dung and mud, there usually stand one or two diminutive empty huts, the only preceptible religious symbols. Trees covered with hunting trophies are not to be found, but here and there

an aloe with white-striped leaves is grown, which in Ugánda and Unyóro is always employed in incantations. The granaries are usually cylindrical, but the lower segments of some are hemispherical and rest on a stand. Their covers, which are movable, are of the usual shape. Numbers of closely woven, very roomy, skittle-shaped weir-baskets and fish-spears betoken an active pursuit of fishery, while the absence of hunting trophies indicates no great love of sport. The weapons we saw were lances, a sort of broad-bladed axe with a sharp spike projecting from the back, and knives of various forms; specimens of each of them were collected. Every woman carries a small crescent-shaped knife attached to her girdle by a leather thong.

All the women were diligently engaged in household work, one of their duties being to beat and clean the freshly gathered eleusine corn with a wooden mallet or club. Besides fetching water and cooking, weeding and carrying away the rubbish, reaping and bringing in the harvest, and the manufacture of all kinds of crockery, pipe-bowls included, devolve solely upon the women. The men build the houses, till the fields, fish and hunt, milk the cows and goats, and smoke. A singular kind of pipe is much used; a very long stem has a slit made in the side at its lower end, into which a green leaf rolled into the shape of a funnel is pushed and is filled with tobacco. A fresh leaf is used for each pipeful, and the quantity of tobacco used each time is but small. Tobacco is largely grown in the mountains, and is brought here to be exchanged for dried fish.

About ten minutes' walk to the south of this village the lake is joined by Khor Erra, a never-failing stream of cold water. The high grass near this *khor* is the haunt of a rare crake, *Ortygometra egregia*, a bird extremely like the small waterhen in its habits. All the land between the station and this village, to the south of which lie three other *zeríbas* subject to the same chief, was very well cultivated, and this year's second crop of durrah was just ripe. Maize, red and white durrah, eleusine, sesame, a little tobacco, a kind of cucumber, and near the station *bamia* (*Hibiscus esculentus*, called *wéka* in the Sudān), and ground nuts have been planted here. Bananas are not found, except, perhaps, in the more sheltered side valleys.

Fig-trees, planted and cultivated everywhere in the east, are not found here. The few bark cloths occasionally seen come from Unyóro, and only people in good circumstances can afford to buy them. Salt also is brought from the same country, though some is obtained here by burning grass and washing the ashes. Saline earth is said to exist farther northwards, in the district of Chief Boki. The only domestic animals visible were sheep and goats; the cows were perhaps out grazing with neighbours in the mountains. The goats are fine, slim, tall animals, but rather short in the body, and short-haired; the sheep are large, and resemble the thick-tailed breeds of the lower Nile (Sudān). No dogs were to be seen.

The language is very similar to that of the Shúli and Shefalú, which is spoken in the neighbourhood of the rapids of Karúma and Táda, and it is quite identical with the idiom spoken in Wádelai's and Rokéto's districts. As many of the people here speak Kinyóro, I was able to make myself understood without the aid of interpreters, and in spite of the limited time, I managed to compile a small vocabulary, which reveals the almost complete conformity of this language with the Shúli. I tried afterwards, in Fatíko, to compile a Shúli vocabulary also, and have already alluded to the great similarity existing between this language and that of the Shíluk, which, however, is only known to me from the small Jur (Shíluk) vocabulary in Dr. Schweinfurth's excellent collection. The hypothesis of a great Shíluk migration to the south, which I venture to put forth, is chiefly supported by the really surprising similarity of the languages, manners, and customs of the three peoples above mentioned, and is the more probable because Dr. Schweinfurth reports the existence of members of the Shíluk family in the Bahr-el-Ghazal territory, so that their presence here is not surprising, nor is this an isolated instance. The Shúli themselves say that their forefathers came from the north. It is to be hoped that later and more competent inquirers will succeed in throwing a clearer light on this most interesting subject.

Here also the name Lúr or Alúr was given as a general name to the country south of the Mádi district as far as and beyond the true Mahagi marked on Mason's map, and the district here is named M'svar or Kasvár (probably Mason's

Nursvar). Chief Makambo's land, Mahagi, lies to the south, then M'sóngua, Magúngo, and Káfatāsi, where Lúr ends. Northwards along the lake and river the districts succeed one another as follows:—Chief Boki's country, Fanyumori; Chief Okello's country, Fanégoro; Chief Rokétto's country, Farokéto; the country of Fabongo (just now without a chief); Chief Matum's country, Foquáte; and lastly Chief Wádelai's country, Kōche. These are the very names which Baker gives on his map for the country to the north of the Victoria Nile, near its mouth, and therefore I can only suppose that the men he interrogated did not understand him correctly, with regard to the river at any rate, or that he incorrectly interpreted the bad Negro Arabic in use here. Had I only heard the names once, I should have kept silence, but they were repeatedly confirmed during our marches by land from Mahagi to Wádelai. The existing maps of the upper Nile abound in so many errors, that it seems desirable to prepare a more correct one of that part of the river which lies between the Victoria Lake and the Sobat. For the present I will only refer to Kidi, which ought to be called Lángo, and to Chippendall's route, which, like a chameleon, assumes a new appearance with every map that is published.*

From the hills in this neighbourhood, Chief Arera's country, Nyelea, can be seen, beside a lofty mountain of the same name; from there due west lies Areja's country, Angāl, adjoining on the north the district Jabakōt. Javulé, which comes next, is four days' journey across, and extends to some mountains, from which a large river flows down to the west. I give this information exactly as I have received it from the lips of Negroes, and will now check their statements by the following facts. Soldiers without impedimenta reach Wádelai from Mahagi in two days' rapid marching; they sleep in Farokéto, which is about half-way. Cattle despatched from Mahagi station reach Wádelai in five days, travelling each day from sunrise to midday. Therefore the distance between these two stations, following the lake and the river, may be assumed to be fifty

* Sheets 2 and 8 of E. G. Ravenstein's Map of Eastern Equatorial Africa, published by the Royal Geographical Society, will be found to present the whole of the information available at the time it was published (1883).

miles. No large streams have to be crossed along this route, but near to Wádelai two *khors* flow to the main stream, having water breast-high during the *kharíf*. The most southerly one is full of vegetation, and may be an old river-channel; the other one comes from the mountains in the west. From Wádelai to Dufilé the journey can only be made along the east bank, because of the hostile Negroes (Mádi). Many deep ravines impede the traveller, but men without loads can traverse the distance in three days' good marching.

The country between Mahagi and Wádelai is hilly, and shut in towards the west by mountain ranges which are visible even from the river; it is very thickly peopled, and very rich in herds and flocks of all sorts. Actual woods do not exist, but groups of splendid trees of all kinds are scattered over the country. The large neat villages are exactly like those previously described, and the language, manners, and customs are the same throughout the Lúr country.

From Mahagi station a road leads along the hills, then entering a narrow valley and changing its direction from south-west to west, it takes one in five hours to Nyelea, a very populous district, where banana plantations exist in the valley near to the *khor*. From that place I obtained a goat, which differs from all other kinds found here by its long coat. The hind-legs and head especially are so thickly covered with long stiff hair that it drags on the ground, and the goat has to shake its head in order to see. Only a few specimens are to be found in this neighbourhood, but they are said to be much more prevalent farther to the west. I have also seen the same kind, with hair growing even more luxuriantly, in Ugánda, and procured some of the skins. They are brought to Ugánda from Usóga, where they are kept in small herds, raised sleeping-places covered with grass being purposely made for them, so that the hair may not be spoilt. It was difficult to obtain living specimens of them here, for the owners would not sell them.

Three hours' march in a north-westerly direction over a country abounding in high hills, covered with bushes, and intersected by numerous deep *khors* of icy water, take one to Chief Aguiri's land, Jabakōt. One and a half hours more in

a westerly direction, and the traveller is on the frontiers of Lendú, which country has not hitherto been visited by Europeans. From Jabakōt, very high mountains are visible to the west; to the north lies another mountain chain, which is said to belong to Lúbari. The direction of all the *khors* in the country just described is easterly. Lúri is spoken everywhere, but another language is said to exist to the west.

An ascent of the mountains directly behind the station Mahagi led to no good result. The foreground is, at the most, a mile and a half broad, and consists of a very rich red or coffee-brown vegetable mould, which might have been made on purpose for crops. Here and there pieces of granite,* blackened by weather, and blocks of mica appear. When we left the station at 6.30 A.M., the aneroid read 27.60 in. at a temperature of 75° Fahr. The ascent is extremely steep, and is rendered more difficult by numerous fragments of stone and long grass, where the foot is apt to slip; here and there we had a pretty glimpse of the lake, which was unfortunately covered, as usual, by a veil of mist. Along the verge of deep ravines, with water rushing along below us, we gained the top, after a hard climb; but only a plateau studded with many little domes was visible, shut in to the west by the Nyelea group, and to the south by the imposing heights of the Erúku. To the north the mountain ridge extended in an unbroken line. The small single elevations are usually separated from one another by deep ravines. High grass and very sparsely scattered trees, generally butter-trees (Butyrospermum) and tamarinds, grow on the hills and in the hollows, rich vegetation only abounding where there is water. Numerous fox-coloured baboons were barking among clumps of trees, the deserted durrah fields supplying them with plenty of food. We passed two smaller peaks (aneroid, 26.97 and 26.89 in.), and then climbed the higher summit (aneroid, 26.78 in., temp. in shade 83.3° Fahr.), but it did not afford any view. The prevailing rock is a light grey, very fine-grained granite, upon which layers of mica often lie, quite in accordance with the general

* Gneiss should probably be read instead of granite in most cases, for, to the best of my knowledge, no typical granite has yet been found among mineral specimens brought from the farthest part of the upper Nile territory.—G. S.

character of the country. Where the rock has been long exposed to the sun and rain, it has assumed a colour varying between chocolate-brown and black. After a short rest we started on our way back, and reached the station towards noon (aneroid, 27.62 in., temp. 86.9° Fahr).

Meanwhile some of the neighbouring chiefs had arrived at the station to pay me a visit, all of them dressed, like Kabréga's men, in soft cow-hides, but not carrying large sticks, as do the Wanyóro. Their powerful figures were of medium height and very black, some of them with artistic coiffures, others shorn quite smooth; they were ornamented with brass and a few copper rings, and they made a good impression by their modest behaviour. They too call their whole country "Lúri." The names Tóru (south-east corner of the lake) and Usóngara are well known to them, and the names given above for the districts of the surrounding country were fully confirmed by their statements. Between this country and Unyóro there was formerly, it is said, constant communication, and a very active traffic was carried on; even now the chiefs here acknowledge the supremacy of Kabréga, the ruler of Unyóro. Communication is accomplished by means of boats, which coast along to the north, enter the river, and cross over it to get along the other coast to Magúngo and Kibíro, where salt and iron are bartered for Colobus skins. The people who now inhabit Londú, in Unyóro, told me, when I visited them, that their fathers and forefathers came from the western side of the lake. They are said to have been carried off from a district, A-Londú, to the south and west, and to have been settled as slaves by Kamrási, Kabréga's father, in their present home, to which they afterwards gave the name of their own country. They practise circumcision, which is very unusual among our tribes.

It was scarcely possible to make thorough inquiries about the manners and customs of the Negroes here, owing to the short space of time at my command and my other numerous duties. Just as in Unyóro and Shúli, the four lower incisors are extracted, or rather pushed out, at the age of puberty. Tattooing with scars, which are produced by burning razor-cuts or with acid, is common, especially on the temples—where, also, in Unyóro scars are made by cauterisation—and

at the outer corners of the eyes, where they converge to a centre.

Three cows and an ox, and also (if the suit be accepted and the cows are not returned) two goats or sheep to be killed at the marriage feast, are considered an equivalent for a girl arrived at maturity. The expense of the marriage feast is borne by the bride's father. If the wife is barren, she may be put away, in which case the father has to pay back the ox and one of the cows, and his divorced daughter can be sold in marriage again for half the above price. Delivery, the division of the navel cord, the washing of the child and anointing it with butter and red clay (which is very dear here), and the naming of the child are performed exactly as in Unyóro.

The clothing is rather primitive. Chiefs wrap themselves in tanned cow-hides and antelope skins, the hair having been scraped off, and the lower edge of the skin is often trimmed with stripes of the white mane of the *Colobus guereza*. When able to procure it, they dress in the coarser bark cloths of Unyóro. Other men are generally covered with a goat's hide knotted over the shoulder, but many have only a leather covering in front. The women wear a short tail behind of red twisted cotton threads fastened to the girdle, and a covering of three fingers' breadth in front. Girls are, as a rule, perfectly nude. The girdles are in all cases ornamented with cowries or beads and with iron rings. Necklets made of banana (*Musa ensete*) seeds, necklaces, arm-rings and anklets of iron, brass, and copper (rare), ivory arm-rings, spirally rolled brass wire covering the fore-arm like a coat-of-mail, and called *mula*, roots on strings, and finger-rings of brass wire were all the ornaments I noticed. It is strange that here, as well as in Ugánda and Unyóro, ear-rings are very rarely worn; in fact, piercing the ears is a thing almost unknown.

The dead are bewailed, and are buried full length in a grave in the immediate neighbourhood of the huts. Stones are laid upon the grave, and if the deceased was a chief, a small hut is built over his place of burial, gifts of corn are laid within, and a goat is slaughtered.

Bows and smooth iron arrows are carried as weapons; they are often covered with a thick layer of poison, and carried in

roughly made quivers of goat-skin. The spears have a very small blade, fixed at the end of a long neck of iron. A kind of coat-of-mail made of buffalo skin takes the place of a shield; a rectangular piece about forty inches long by fifteen inches broad, according to the man's size, and as thick as possible, is fastened in front of the body and tied behind, the outside being usually ornamented with bosses. When travelling, every Negro carries a sort of knife, with a broad blade fixed into a piece of wood; it is used more for cutting down branches than as a weapon. Boys often carry very pretty imitations of this weapon, made entirely of wood. In hunting, the weapons just mentioned are used, as also traps, nets, and pitfalls. In fishing, they use very large weir-baskets, nets, and large iron fishing-hooks. The women carry in their girdles a small knife, with which they reap.

It was difficult to make any zoological collections here, as the tall grasses were being burnt down in the neighbourhood. A gorgeous sight was presented, especially at night, by the tongues of fire creeping up the hillsides, and the flaring up of the flames wherever there was much dry grass lit up the lake far out into the darkness; but the result was disastrous to the animal and vegetable world. One night the fire came so near to our station that we were obliged to kindle another fire as rapidly as possible in order to protect ourselves. It will be easily seen that under such circumstances there could be no thought of botanising. However, I obtained two pretty ferns down by a river, and these I added, together with some mosses, to a large collection of ferns I had already made in this district.

Two species of baboons, and especially *Colobus guereza*, are very common indeed. I was able in a very short time to shoot six specimens of the latter, called here *dalla*. The chimpanzee is said to be found a few hours to the south. Its northern limit, here as in Unyóro, is identical with that of the rattan palm, that is, about 2° N. lat. Of rare birds, I may mention Peters's crake (*Ortygometra egregia*), which was seen in covies of three to six individuals, running about like hens in the grass near the watercourses. It is difficult to make it rise, and it is most easily caught by snares; when caught, it shows

fight and makes a snarling noise; its native name is *dagga-dagga*. Of the common fowl and the half-breed, I obtained a yellow-billed, yellow-footed francolin and a delicate, pretty *Turnix leburana*, called by the natives *amvuddu*, and by the Kinyóro *andula*. The harlequin quail (*Coturnix Delegorguei*) is very common, and I believe this to be its native place. From Dufilé southward this bird is to be found throughout the whole country; it appears, however, to wander periodically from south to north. Its habits are just those of the ordinary quail, but its cry is very different, although it does remind one of the quail. The native name is *aluru*, the Kinyóro name *heru*. Later on, in Elema, I found the hitherto (I believe) unknown eggs of this bird.

In addition, I may say that here, as southward towards the equator, the dolèb palm is rarely seen. A yellow flowering Cassia, having a strong aperient action, is very common.

After a very short stay, we left our station of Mahagi early, under a clouded sky, in order to visit Mahagi proper, lying farther to the south. A strong south wind and a light load caused the steamer to roll horribly. After making a great curve to avoid the shallows which lie to the south of our station, we steamed on, having the shore at a short distance to our right. The mountains were enveloped by a thick fog, which also completely veiled the eastern border of the lake. Small white waves were raised by the wind upon the deep green water, in which numbers of darters were fishing. The sparsely wooded mountains, which at this time were on fire for days, rise to a considerable height, and culminate in Jebel Erúku, a very massive mountain with deeply furrowed flanks. A ravine separates it from the next chain, which runs behind the other one, and from this point the mountains come down sheer into the lake without the intervention of a level tract of land. The lake is low now, and a narrow foreshore, mostly covered with rubble, lies exposed.

Between the station and Jebel Erúku the level tract along the lake narrows to six hundred yards, but it is well wooded. The whole of the thinly wooded mountains are furrowed by deep water-channels, which are filled with luxuriant vegetation and bamboo thickets, small waterfalls being very numerous.

The water-mark at the foot of the mountains showed that the lake had fallen about eighteen inches.

We halted at 10.17 A.M. near the hot springs. At the foot of the almost precipitous cliffs there is a strip of sand about ten feet broad, covered over with fragments of stone, amongst which I noticed beautiful red-ribbed quartz and much mica; at high water no doubt the whole of this place is covered. The cliff itself is a very fragile grey stone, split and cleft in all directions, so that one can lift out great pieces with one's hand. The inner surface of such pieces is of a yellow-ochre colour, covered in part by white efflorescence, having a bitter taste. This efflorescence is also found in great quantity on the pieces of stone lying about. From all the rents and crevices of the rock perfectly clear yellowish water exudes; it smells and tastes strongly of sulphuretted hydrogen. The temperature of this water was in one place 115° Fahr.; in two others near by 128.3° Fahr., the water in the lake being 84° Fahr. The atmospheric temperature was 81.5° Fahr., whilst the aneroid read 27.7 in. (11 A.M.) The temperature of the air to a height of 4½ feet above the ground was very hot, viz., 100.4° Fahr. One could not see any real sediment or animal life in the water, but there was a kind of white slimy substance upon the stones over which the hot water flowed. I took samples both of the rock and of the efflorescence for analysis. Many flowering euphorbias, two small wild date palms, and numerous bamboos grew in the neighbourhood.

I may be permitted to add here a few words concerning the hot springs in this country; I know of four, and they all contain sulphur. Going from north to south, the first is found to the west of Ladó, not far from the road which leads from Niambara to Makraka; it is called Rillek, and has been visited and examined by Dr. Junker. The next lies on the north-west slope of Jebel Labilla or Abul Sala, to the E.N.E. of Dufilé; it is very large and very hot (156° Fahr.), and is called by the Mádi "Amruppi." This hot spring appears to be either intermittent, or else to vary much in the quantity of water it yields. Near to this spring lies a second, containing boiling water. The third warm spring (133° Fahr.) is situated in the Shúli district, two and a half days' march to

the south-west of Fatíko; it is much smaller than the others. I have also heard of other very hot springs which are to be found in a district called Turkan, twelve days' march to the east and south-east of Fatíko. It is from Turkan that camels have been brought here, which still thrive. The well is said to consist of a deep circular basin in the rocks.

Steaming on towards the south, past a narrow tract of level land, the mountains became higher and higher, and behind them another parallel chain was seen at intervals. Several large villages and extensive fields of durrah were noticed upon the heights. The highest mountain has two peaks; it is probably 3000 feet above the level of the lake. After we had steamed for some time along a widening tract of low land, we landed, at 1.24 P.M., at Mason's Mahagi. The time occupied in steaming from our station to this point was four and a half hours, but twenty minutes must be deducted, as this time was occupied in circumnavigating the shallows. We anchored in ten feet of water in a kind of bay. The depth of the water throughout our journey varied from twenty to fifty feet. It appears as if the western part of the lake is shallowing considerably, if indeed the whole lake is not gradually becoming smaller. The little bay is surrounded by a broad strip of land covered with gravel; no shells are to be found here, and at station Mahagi they are very rare, whereas on the eastern side of the lake the shore is perfectly covered with univalves, and more rarely with bivalves, in many places, such as Ronga and Kibíro. In their place, however, we find crocodile egg-shells in great numbers, crocodiles being very numerous in the lake. High hills covered by grass form the commencement of the mountains, which present imposing outlines towards the south. There are extensive banana groves between the hills, and solitary sycamores having large edible fruits. On one of the trees I had the good fortune to shoot a specimen of the rare *Treron nudirostris*. I noticed here a stately tree which had large sweet fruits containing a long seed exactly like the fruit of the dog-rose;* the fruit is eaten by birds and insects. The watercourses are fringed by great thickets of reeds, and here and there fields of sesame and durrah show that the

* Probably a species of Mimusops.—G. S.

inhabitants are not far off. Yams (*Dioscorea alata*) are cultivated here, and rattan is not uncommon. The people speak the Lúri dialect. When I asked them the name of the lake they replied, "Nan Madduóng" (Great Water); the name "Mwután-Nzigé" is only used in Unyóro; in Ugánda this name is hardly understood.

We started on our return voyage at 4 P.M., and arrived at our station at 8.38 P.M.

As official duties called me to the north, I was obliged to leave this interesting land. We hugged the shore, and fog again prevented me from making many observations. We passed many large boats, propelled with two to six large paddles. At 11.30 A.M. we were exactly opposite the mouth of the Victoria Nile, and half an hour later we entered the Bahr-el-Jebel, the banks of which were again enlivened by numerous herds of antelopes. I saw here a small hawk with very long pointed wings, dark grey upon the upper surface, white underneath. Perhaps it is the *Chelidopteryx Riocourii*; it flew in pairs. We halted for the night at 4.55 P.M. to the south of Wádelai, in the proximity of many villages and durrah fields. Wood was immediately brought by the natives for sale. The most remarkable, but most useless of the natives was a man who carried about as a trophy a small looking-glass hung to a bent stick; he inconvenienced everybody by reflecting the sun into their eyes. I had formerly given this glass to Wádelai's brother. I was told that six days' march from here towards the west there is a large river flowing to the west; it is called Wai.

As the question of the existence of a river flowing from here towards the west, although apparently answered by Dr. Junker's journey, is still disputed by others, I went from here to Bora, where a chief is said to live who knows this western river. After finding him (he is named Libba), and obtaining him as a guide by the aid of a small present, he took me to a place where we only found a broad bay without any outlet to the west. A Dongolaui then offered to guide us, and led us up-stream for about three miles to an enormous papyrus wall, which he indicated as the place of outlet. Near by, a little to the south, lies a small Mádi village, which we visited. The

people at once fled, and it cost us much trouble to pacify them. When I requested their chief, a young man of about eighteen, to guide me to the *khor*, he expressed his willingness, on condition that I accompanied him unarmed. This I agreed to, but unfortunately it had become too late for our expedition. After walking for about a couple of miles through a tall grass jungle, we saw, at about two miles distance, a swampy bed about three-quarters of a mile to one mile broad, and overgrown with plants, extending in a great curve from E.N.E. to W.S.W. On either side of it were enormous barriers of papyrus; grasses and reeds covered it almost entirely, and water was only visible here and there. The chief told me that this watercourse ran far into the country, where at last it could be forded. The impression that I received was, that it was either an old river-bed or a dead arm of the Nile converted into a swamp. The Mádi call it "Lárogoi." We returned to the steamer exactly as the sun set. The fields here were all surrounded by straw hedges, to protect them from wild animals. Elephants were said to be very numerous. Very large fish were hanging upon frames to dry. After steaming for rather more than a quarter of an hour we arrived at Meshra-es-Seïd, where, to give my people a rest, we remained for the night. The next morning we reached Dufilé at 11 A.M., our voyage having been greatly delayed by a very strong wind.

I occupied my short stay at Dufilé by compiling a vocabulary of the Mádi language, which is quite different from the other languages spoken in this neighbourhood, but has a definite relationship to the Makraká language. There was not much to collect, for the grass had been burnt down near the station. There is, too, no forest here; only a few solitary tall trees exist. Chief Abu Nakhra, who lives to the west of the river, gave me some interesting notes on the Mádi tribe, and confirmed my opinion that Khor Lárogoi was in very fact an old river-channel.

In order to complete some previous itineraries, I took a new route from Dufilé to Fatíko and Fauvera, across Jebel Labilla, which route I have mentioned elsewhere. Communications had already been opened up between Fatíko and our new

station, Wádelai, and I received letters from there in two and a half days. The route is as follows:—Fatíko to Jebel Nurvira (Jebel-el-Ajuz), five to six hours; Jebel Nurvira to Fagāk, six hours; and from there to the river, two and a half to three hours.

5. A Sail upon the Albert Lake (1885).

(A Letter to Dr. Felkin.)

THE NILE ABOVE WÁDELAI—THE LAKE—A WOODING-STATION—WATER-FOWL—MAHAGI AND ITS NEW ISLAND—KABRÉGA'S AUTHORITY ON THE WEST BANK—A STORMY PASSAGE—EROSIVE ORIGIN OF THE LAKE—KIBÍRO AND ITS BRINE SPRINGS—FISHERMEN—A NATURALIST'S RAMBLES—RETURN TO THE NORTH.

A FEW miles south of Wádelai the river (Bahr-el-Jebel), which hitherto has been flowing between two parallel ranges of hills in a bed only one-third of a mile wide, suddenly expands to a breadth of nearly two and a half miles. This broad expanse of water is studded with numerous small islands formed of reeds and papyrus, and its shallow bays, even in seasons of high water, harbour herds of hippopotami. Cautiously the steamer glided over the shallows, permitting us to view numbers of pelicans swimming about and pursuing their business of fishing, and groups of black heron-like Anastomus standing in small companies knee-deep in the water. Owing to a plentiful supply of good dry wood, the *Khedive* was able to steam at high pressure, and so we soon reached the landing-stage of Fabóngo, from which place the road for Anfina's village branches away. The village of Fabóngo, which is inhabited by Alúri, lies a short distance back from the river. The landscape along the river to the south is not specially interesting, if we except the majestic river itself, which is the best part of the scene. The western bank is bordered by a chain of hills, which is for the most part thinly wooded, and which, whilst generally hiding from sight a second range behind it that runs down to the lake, yet allows its summits to be visible from time to time. Here and there occurs a solitary doléb palm, but candelabra euphorbias and tall bushes of the *Calotropis procera* are plentiful. The eastern

bank is flatter, and is covered with short grass and planted with a few trees; it is, in fact, of the true savannah type. Everywhere there were large herds of antelopes, and very frequently a troop of elephants appeared on their way to pasture or to get water. The banks seldom rise more than a foot and a half above the surface of the stream. Immediately behind the fringe of bushes that line the banks, were the durrah-fields of the sparse native population, to guard which numerous watch-huts have been erected. The harvest, in consequence of continued drought and want of rain, did not look very promising.

Shortly after noon we passed the village of Fanigoro, belonging to the chief Okello, which gives its name to this particular district. The village, consisting of scattered groups of huts, generally erected under the shade of a few clumps of trees, is spread over the upper slopes of the western hill-range. Numerous huts appeared also on the east of the river. The inhabitants are Alúri, together with Shifalú-Wanyóro, who, under their chief Amara, migrated hither in 1879, when we abandoned our station at Magúngo. Both languages—Lúr and Kinyóro—are consequently spoken here.

A short distance to the south of Fanigoro, the principal mountain range on the west of the lake approaches considerably nearer, and splits into two distinct parallel chains, the nearer one being lower than the more remote one; the latter, however, as it trends away towards the south, is frequently screened from sight by the former. The eastern bank of the river-bed now receded farther and farther towards the south-east, for the course which the river takes is slightly towards the west. At 2.30 P.M. we saw the extreme point of the right margin of the river; thence it recedes eastwards to the mouth of the stream which reaches the lake from Magúngo.

Entering the lake, we were met by masses of drifting Pistia rosettes. We hugged the western shore, and soon reached the district of the chief Boki, and his village, which bears the name of Fanyumori. Seen from a distance, this village has a very inviting appearance. Along the foot of the somewhat lofty hills, which bear on their slopes numerous huts constructed in the Magúngo style, is a broad low-lying tract, covered with short, succulent green grass, and having several groves of fine

trees. Fields planted with ground-nuts and maize, small herds of cattle and goats quietly grazing, groups of people industriously weeding and sowing, women washing at the river, with little children playing around them—all this made up a picture of peace and prosperity such as, unfortunately, is seldom seen in this part of the world.

On being signalled by the steamer, the people immediately brought a quantity of dry wood, but to get it on board was a labour attended with some difficulty; for, in the first place, the boat, owing to the shallow water, could not get close inshore, and in the next, the people found great difficulty in wading through the lake with the heavy beams on their heads, in consequence of the strong wind. The chief, Boki, an old acquaintance, came to us in a boat propelled with oars of bamboo, and begged us to take some bamboos from him to Kibíro, as Kabréga wished for them. This was strange, because bamboos grow plentifully in Kabréga's own country. The chief's visit did not, however, last long, as the rolling of the steamer did not seem to be quite to his taste.

The wind was meanwhile beginning to blow more strongly, and, seeing that it was almost impossible to get the wood on board, we deemed it advisable to steam on to the wood-station, a little farther to the south, and there take in, early on the following morning, a sufficient supply to last us all the way to Kibíro and back, for no wood is to be obtained at that place. Accordingly we steamed first south, and then south-west, parallel to the mountain range. The foreshore in this part is well wooded, and the chain of hills runs up into some peaks of considerable elevation, whilst beyond them we saw now and again the summits of the more distant range. The flanks of the hills were very scantily wooded. Owing to the heavy rolling of the boat, the journey was not a pleasant one; my people have no idea of the utility of ballast. Twice on the way we met enormous shoals of small fish, apparently proceeding northwards. The water of the lake was for a considerable distance coloured light bluish-green by them, and their continual movements occasioned a kind of bubbling, and at times much splashing. Here also large masses of Pistia were observable, likewise floating northward.

Half an hour's steaming brought us to the wood-station, a thick forest of considerable extent, on the edge of which, close by the lake shore, Boki's people have erected their huts. Here, in spite of all our foresight and precautions, we had a bad night of it; a kind of cyclone raged from midnight till morning, and several times made us anxious about the steamer. Early next morning all hands were got to work at felling trees, and the inhabitants of the place rendered first rate service with their boats in getting the wood on board the *Khedive*. From here the eastern shore of the lake was pretty plainly visible as a chain of hills having a north-south axis. When the mist cleared off, we also saw another distinct mountain mass, situated farther north, the middle of which bore east by south (103°); this I concluded was Jebel Geïsi, near Kiróto. An expedition into the forest on shore did not reward us for our trouble, and we were soon compelled by the buffaloes to return.

The trees we felled in this locality were mostly *Diospyros mespiliformis*, an excellent material for firing purposes, and one that is greatly liked for building. It has a fresh reddish colour and a pleasant smell; when felled, it soon assumes a beautiful darker tint. It resists the attacks of termites pretty well, yet it did not answer, we found, for boatbuilding; but it serves excellently for making gunstocks, especially when it has been buried for some time in the ground. I also observed another sweet-smelling species of timber amongst the firewood brought on board, but I could not ascertain from what tree it came. I am inclined to think that it was a species of Vitex.

All along the river and in the lake I was struck with the relatively small number of species of water-birds. Farther north, in the Bahr-el-Abiad, between 12° and 15° N. lat., water-birds and marsh-birds occur in innumerable flocks, while to the south, in the localities mentioned, one cannot find a single duck or goose; and although we can explain this very marked difference during the winter season (November to March) by the fact that large numbers of European emigrants on their way to the south do not proceed beyond the marshy tract between Sobat and Ghaba Shambé, still this will not account for the paucity of species, and for the small number of

the species which do occur, in localities that are so eminently suited for them farther south. Some herons (*Ardea alba* and *A. comata*) went on fishing around the steamer, quite regardless of the bustle, and a little farther away I noticed specimens of storks (*Anastomus lamelligerus*), Le Vaillant's darter (*Plotus Levaillanti*), and cormorant (*Phalacrocorax africanus*). A few yabirus (*Mycteria senegalensis*) were searching an inundated low-lying piece of land, and on the margin of the lake a few Egyptian geese (*Chenalopex ægyptiacus*) showed themselves. With the pelicans mentioned above as having been observed in the river, I close the list. Not a single plover was seen, nor yet a strand-snipe or a duck.

By noon we had enough wood on board, and with a very fresh wind we steamed, at about one-third of a mile from the shore, towards the south, having the western hills on our right. In height these range from 1200 to 1500 feet; they are for the most part thinly wooded, and their sides are often seamed with watercourses; thickets of bamboo appear in places. The watercourses, however, are little more than rain-channels, and even in the rainy season they are often dry. Their direction is shown by the denudation and seaming of the hillsides, and by the scattered blocks of stone; they have, of course, in most cases followed the natural foldings and crevices of the rock. The level margin of the lake, the width of which varies considerably, is for a short distance well inhabited, but farther towards the south the huts disappear, and park-like land is intermingled with fine groups of trees, patches of desolate grass, and dense forest. On the east the mountain chain was scarcely visible, owing to the veil of mist that enveloped it.

After less than an hour, we came upon a long spit of sand, in the shape of a crescent. On keeping well to the west, we soon perceived that it was an island, and came to anchor at about fifty yards from its shore. This island lies somewhat farther south than our deserted station of Mahagi, which we recognised from three large trees growing there. Immediately behind Mahagi, which bears N.N.W. (334°), the western chain of hills descends with a gentle slope, and the more distant range behind comes into view. The latter contains summits

of considerable altitude, which may be compared with Jebel Erúku, and still farther south it has yet higher peaks; the entire range is called by the Negroes, from the country behind it, the Mountains of Léndu. The island, off which we lay, is separated from the mainland by a narrow channel, which was not deep enough for the steamer. To judge from the great quantity of mud in it, this channel will ere long be quite filled up; meanwhile it is kept open by the strong current that is driven through it by the powerful south wind.

The island is very short, of crescent shape, and lies with its convexity towards the north. It is of quite recent formation, for in 1879, as we noticed whilst going across from Mahagi to the hot springs of Kibíro, the spot where it now lies was covered with shallow water. It was therefore formed within the space of about five years, for it has been already occupied for two years. Its maximum length, from horn to horn, measures 3200 feet, and its maximum breadth 300 feet; its greatest height above the level of the lake is about 6 feet. Its shores, which are flat and slope gradually down to the water, consist entirely of drift sand, and surround a firmer centre of rich dry mud. Tall grass and reeds grow at the water's edge, and a species of acacia (*Acacia mellifera*) upon the higher parts of the island. A multitude of black-headed weaver-birds (*Hyphantornis dimidiata*) were flitting about the island, numerous little fly-catchers (Muscicapa) clung to the stems of the reeds, a flock of *Phalacrocorax africanus* were sunning themselves on the margin of the water, and close by them some huge crocodiles were lazily basking in the sun. These creatures seem to abound in the neighbourhood; we afterwards killed one which measured 11⅓ feet in length. Turtles of great size must also be plentiful in these waters; at least I infer so from the large eggs which we found so abundantly everywhere; but I never succeeded in getting possession of one of the animals themselves.

The origin of this island, to which the natives give the name of Tunguru, admits of easy explanation. The large volume of water contributed to the lake by the two principal feeders which join it in the south-west—viz., the Nyussi-Msisi and the

larger Duëru—flows principally towards the east side, so that the detritus and sediment which those rivers bring with them in suspension are deposited on the west side of the lake. In the case before us, this process is largely aided by a projecting point behind the island arresting the rain, and facilitating its precipitation. From what I have observed of the lake, I am inclined to believe that the flat shore on the west is gradually encroaching upon its waters; in other words, the lake is in this part gradually filling up.

The chief of the whole district of Mahagi is my old acquaintance Songa, a trusty and reliable man, who came to pay me a visit late in the evening. On receiving a few small presents, he made many apologies for coming empty-handed; my arrival had taken him completely by surprise. All Negroes must not be set down as drunken good-for-nothings and beggars. The entire population of the west shore, from Okello's village, Fanigoro, right down to the recently subjugated land of Mboga, acknowledges the supremacy of Kabréga. This prince maintains relations of close intercourse with the several chiefs of this region by sending them from time to time small presents of Zanzibar cloth, or a few pieces of finer bark cloth, which is imported from Ugánda, and is greatly esteemed in this country. In return for these presents the subject chiefs do not, apparently, render any fixed services, but in Kabréga's last war against Ugánda they gave him great assistance by sending supplies of arrows, lances, and shields. Kabréga has also, on occasion, complied with the request of the Lúri chiefs, and sent some of his men across the lake to aid them in making raids into Londú, over on the other side of the hills.

Mahagi is an exceptionally healthy place, and is particularly well adapted for gardening and agriculture. The abundance of water in the neighbourhood would greatly facilitate irrigation. For the present I have left only very few people there, but I intend shortly to establish a permanent station. Unfortunately, the steep ascent and the impassable nature of the bordering mountain chains make communication with the districts to the west very difficult, but possibly a more accessible pass may exist farther to the south.

For two days past, the aneroid had indicated an abnormal

atmospheric pressure, and an attempt to determine the elevation of Mahagi with a boiling-point thermometer, for the purpose of checking previous determinations, was therefore a failure. In the night this low pressure was compensated for. It had begun to blow hard in the evening, and thunder and lightning, with rain, in the south, held out no promising prospect for the night; the storm kept off, however, until midnight. The steamer rode in deep water, and was protected by the island against the force of the waves coming in from the south, so that the storm passed away over our heads. But about midnight the wind veered round to the east-north-east, and the steamer then became fully exposed to the violent buffets of the angry waves. The rain came down in torrents. To make matters worse, the anchor dragged, and in a moment the steamer was aground, but fortunately in mud and sand. Every time the white-crested waves struck the broadside of the boat they made her heel over. In spite of all our united endeavours, we were quite unable to free her from her unpleasant position, but by casting out another anchor, and by its means hauling the ship round, we managed to turn her so far as to present her stern instead of her side to the direct force of the waves; even then she felt the shock through all her timbers.

The storm subsided about five in the morning, and the rain ceased; I at once got all hands to work, threw out another anchor, and by reversing our engine, we were able to haul the ship off the mud. About seven o'clock we got afloat, and after repairing minor damages, we started half an hour later to cross over to the east side of the lake. It was still blowing stiff, and the foam-covered waters beyond the narrow extremity of the island looked anything but assuring; and, in fact, we had scarcely passed that point when the game began; in a very short time a large part of my people were prostrated with veritable sea-sickness, and notwithstanding that the motion of the water, and consequently of the boat, was soon greatly moderated, my suffering companions did not recover until we got under the shelter of the land. In a southerly and south-south-easterly direction, the brave *Khedive* steamed merrily onwards, frequently passing obliquely through large shoals of fish, which doubtless felt more comfortable

in the heaving waves than did the majority of my people *on* them. In such places, the light green waters of the lake, owing to the refraction of the sunlight on the glittering silvery scales of the fish, assumed an almost bluish-green hue. The fish were, indeed, so numerous that in less than a quarter of an hour we counted six shoals, doubtless divisions all belonging to one mighty host. On our left we saw the mountain chain of the eastern shore enveloped in mist. Due east we observed some flat strips of sand, sparsely overgrown with reeds, but whether they belonged to an island or to the mainland we were unable to determine in the mist. At length we approached so close to the shore that we got within sight of a long row of hills lying before the mountain range, and presently, also, we saw the foreshore here and there between them and the lake. The lake-side appeared to be bare, green patches, most likely of rushes and reeds, occurring but seldom. The land had a desolate and inhospitable appearance, and seemed to be totally uninhabited. Pursuing a course nearly parallel to the shore, we came, shortly before noon, so close in to it that we could easily distinguish the features of the hillsides.

These hills are high, and green at the foot. Their more elevated parts support a sparse vegetation, but arboreal flora ceases almost entirely, which is perhaps attributable to denudation of the superficial humus by water. In spots, however, where foldings and corners allow an accumulation of humus to take place, and where the moisture can be retained, there exists a richer vegetation, and often even patches of forest. The summits of the hills are mostly either rounded domes or broad flat ridges. Sharp pinnacles are nowhere visible. A superficial examination of the northern portion of the chain shows plainly that the entire region at the foot of the hills right away to Magúngo has been formed by the lake and the rivers. The low ground between the hills and the lake extends northwards in the form of a triangle, and consists entirely of alluvial matter. The range runs due north, and is connected immediately with the isolated hills of Kiróto and Masíndi, which I consider to be the remains of a former chain that has been broken down by atmospheric agency.

As for the lake, I attribute its origin solely to erosion. I

think it more than probable that formerly a large stream may have made its way from the south upon the high plateau between the two ranges to east and west of the lake, so that its erosive action, combined with that of inundations, heavy rains, caving-in, and the influence of sun and weather, are quite sufficient to account for the result. The geological formation of both ranges is the same; their altitudes differ but little, and the terrace-like formation of their descent lakewards is in each case exactly alike. The final decision will, of course, depend upon the examination of the shores, and especially of the rivers which empty their waters into the lake on the south—work to which I hope shortly to direct my attention.

Shortly after noon, we saw at the head of a wide crescent-shaped bay, three large villages, all of which are built on the outlying ridges close to the foot of the hills behind; we cast anchor off the southernmost of these, at about fifty yards from land, but as the anchorage gave no shelter whatever against wind and weather, we had to hold off shore during the day, and at night to go out into deep water. As soon as we anchored, a number of people appeared on shore laden with thin beams of wood—material for firing—but they were agreeably surprised when we told them we did not require it, and only asked for some chips for our kitchen. Some of Kabréga's people who had accompanied me from Wádelai, and were bound for home, had meanwhile disembarked. Their leader, Msige, now came back on board, along with the chief of the place, Kagoro, who is a stalwart and very dark-skinned fellow, with smooth shaven head, and was clad in the indispensable clean-looking ox-hide, above which he had a piece of new bark cloth, and in his hand the long staff of authority which marks the Wanyóro chief. Kagoro bore himself with much dignity, and made a favourable impression upon me. After we had exchanged the usual compliments with each other, and he had placed his district at my entire service—as the old friend of Kabréga, I am held in high esteem by the Wanyóro—we landed together, and sent a messenger to Kabréga, with dispatches for the post to Ugánda.

Having expressed a wish to live on shore during the period of my stay in this place, I immediately had the offer of any

hut I might choose, but I could find none that would suit me; so, early on the following morning, I begged Kagoro to have a hut and an awning constructed for me. This he at once promised to get done, although, owing to the scarcity of materials, it was a difficult task to accomplish. Late in the evening I received a sheep and twelve head of poultry as a present, together with the promise of more on the morrow —of course a promise *ad calendas Græcas*. One must, however, in such cases, rest content with the goodwill and the smooth words. We could not, indeed, expect the natives, who have themselves to buy all their necessaries of life from beyond the hills, to be particularly generous to strangers. Kibíro, the name of the Central African trading station before which our steamer lay, produces nothing but salt, and with this its inhabitants have to purchase even their firewood.

Along the lake shore runs a tolerably broad strip of sand, sometimes coarse, sometimes fine, spread over sharp-edged *débris* of stone, and in some places so thickly strewn with the yellowish shells of a species of small snail as to have a perfectly white appearance. These are the undeveloped outer coverings of two or three forms of which I had already gathered specimens. The bay is entirely surrounded by this girdle of sand; beyond it comes a belt of undergrowth on dunes, where grows a species of Aristida, that takes the place of bent grass (Elymus), and pricks in a most unpleasant manner. On the farther slopes of these dunes we crossed places in which the soil was swept quite bare; heaps of a scoured and finely pulverised kind of earth of a greyish-yellow colour, patches in which the soil had been recently moistened, preparatory to being scratched up (for salt), little pools full of yellowish water, and walls of mud, along the foot of which stood rows of clay vessels ranged on stones placed at regular intervals, proved that the people here engage in some special extraction.

The steadings or hamlets of the inhabitants are scattered all along the low foot-hills, being separated from one another by narrow and very dirty passages; on the whole, they suggest the idea of a tolerably dense population. Each hamlet is surrounded by a reed hedge, often in a very defective con-

dition, and contains a number of huts crowded together. They are constructed in the Wanyóro style, with partition walls of bamboo, a raised sleeping-place for the head of the family, the ground carpeted with hay, and the whole interior swarming with fleas. Vast numbers of poultry abound everywhere; they are a somewhat larger breed than the miniature variety of the Alúri, which, again, rival in diminutive size the poultry of the Monbuttu. Multitudes of dogs, of a breed something like our greyhounds, and of a liver or liver-and-white colour, prowl about the huts, apparently the property of nobody in particular; at any rate they are evidently uncared for, for they are terribly lean, and frequently make forced loans from the interior of the dwellings. Wherever there exists a sufficient quantity of the sparse grass, large flocks of a fine breed of sheep and of goats were grazing, and they seemed to enjoy the vegetation that springs up on the saline soil of the hill-slopes. I saw but one solitary cow. Cattle, indeed, appear to be extremely rare in this district, or else do not thrive well; besides, the mountain pasturage would hardly suffice for feeding cattle.

Between the huts and the hamlets, and often, too, within them, a few small trees grow separately, mostly *Ficus lutea*, from the bark of which the people fabricate the well-known bark cloth. These trees are not, however, expressly cultivated here, but they are so easily propagated and grow so rapidly, that a twig stuck in the ground only requires to be kept moist to take root and shoot up immediately. Close by the margin of the lake stands a single, tall, slender doléb palm, whose crown is literally full of hanging nests of the weaver-bird, belonging to the larger species, *Hyphantornis abyssinica*, which is so prevalent farther north about Wádelai. Here too the bird gave evidence of its very quarrelsome disposition, for at the foot of the tree lay a great number of destroyed nests and broken eggs, proving that serious combats must often have taken place aloft.

The vegetative covering of the hills is of a peculiarly poor character, recalling that of steppe country and deserted arable land. Trees are very scarce; in fact, the sole representatives of true foliaceous varieties were a couple of tamarinds in the

middle of the village, on whose branches rested several snow-white herons. The few Balanites which occur are small and mean in appearance, and Zizyphus does not grow to be more than a bush. A tree-like species of euphorbia (*Euphorbia tirucalli*, I presume), as well as tall *Calotropis procera*, and what was to me a new kind of Datura, with yellowish blossoms, are, however, pretty frequent. But the characteristic covering of the soil, except where the bare stone comes to the surface, is a species of Anthistiria, which, however, is too short to be used for the roofing of huts, and has no particular value as food for animals. At intervals appear, as it were, islands of closely interlaced prickly shrubs, and round about these are clumps of Solanaceæ, tall Ocymum bushes, and some Leguminosæ.

These thickets, which are low and impenetrable, harbour multitudes of small birds, among which the loud comical song of the fantail warbler (*Cisticola ladoensis*) and the full ringing notes of the grosbeak (*Crithagra leucopygos*) were especially conspicuous. This portion of the lake shore forms undoubtedly part of the steppe zone to which Wádelai belongs, and which includes the entire valley of the Bahr-el-Jebel. As ornaments of every pathway and every track, I may mention the great number of turtle-doves (*Turtur senegalensis*) and the beautiful finches (*Lagonosticta rufopicta*), which fly up from under the traveller's feet at almost every step he takes, and, regardless of the noise and bustle around them, go on searching for their food in the midst of the village and the *kraals* as boldly as in the thickets in their vicinity. The relative poverty of the flora and its steppe-like character must be set down to the fact that, although the amount of rainfall, like that in Wádelai, is not small, taking the year through, yet its occurrence is separated by such long periods of drought that the vegetation has no opportunity to develop; nor can the moisture, which is engendered by evaporation from the waters of the lake do anything to promote the growth of vegetation, because it is carried away by the strong winds which almost constantly prevail. Moreover, the humus which covers the stony *débris* is very thin.

Immediately behind the village rises the principal range of hills. The two individual hills which tower above the village

are called Rugoï and Kyente; across these, very steep paths lead to the country on the other side, and to Kabréga's capital. In the opposite direction lies the gleaming lake, backed on the distant shore by a range of hills with a south-west trend.

The bay of Kibíro is rather shallow, and its waters are the haunt of vast shoals of fish, in consequence of which the natives are industrious fishers. In this pursuit they use large canoes hollowed out of bamboo stems, and frequently spend the entire day on the lake. Their oars are bamboo poles and a kind of shovel. In spite of this primitive and laborious mode of progression, these people, especially in favourable weather, not infrequently venture to cross the lake to Mahagi, for the purpose of selling fish; sometimes, indeed, leaving their boats under the care of Songa, they go over to the other side of the hills, where they find a better market for their wares. It sometimes happens, on these voyages across the lake, that the fishermen suffer much from sudden storms and bad weather, and many of them have gone to the bottom. The fish are generally so imperfectly dried—for although abundance of salt occurs everywhere, nobody thinks of using it for curing fish—that they give out a most unpleasant odour, but this does not seem to render them at all unpalatable to those who consume them. This trade in dried fish is carried on in all the districts beyond the hills on both sides of the lake. The chief species of fish that I myself noticed were small Mormyrus and large Hydrocyon.

In the neighbourhood of Kibíro there is not a single square inch of cultivated land; consequently the place produces no corn, no vegetables, no bananas, &c. Even sweet potatoes, which are an indispensable article of diet in other parts of Unyóro, are not planted here, and are only occasionally brought for sale in small quantities from beyond the hills; consequently, corn of all kinds is a very valuable present—in fact, the most valuable one can make; it is also a much-prized article for purposes of barter. All the necessaries of life required by the inhabitants of Kibíro are carried down the steep mountain paths on people's heads; all the energies of the native population—that is, of the women, for the men are lazy and work

very little—are devoted to the extraction and preparation of salt. This constitutes an important industry in Kibíro, which supplies with salt not only all the northern parts of Unyóro as far as Mrūli, but also most districts of Ugánda and the Lúr and Shúli countries. The salt deposits of Kibíro, therefore, constitute one of the most valuable portions of Kabréga's dominions. In the recent war between Ugánda and Unyóro, the Wagánda, before their defeat, demanded a very large quantity of salt (it is said 1000 loads), together with a large supply of ivory, as blackmail, to abstain from war.

We paid a visit to the principal centre of the salt preparation, which lay only about ten minutes east of our anchorage. Proceeding northwards along the lake shore, we could not help noticing the artificial landing-places made by the native fishermen for the protection of their boats, by building up walls of stone and carrying them a little distance into the shallow lake. These stone walls are the favourite resting-places of numbers of black-crested wagtails (*Motacilla vidua*), and occasionally a grave meditative *Scopus umbretta* also takes up his station there. A short distance farther on we crossed the brook that comes from the hot springs; its waters are dammed up so that they only reach the lake by a thin trickling stream; the wind and waves, in fact, often pile up the sand across its mouth in such quantities as to close it up completely. From this point the lake shore trends away in a wide curve; it is everywhere flat, and in certain places thick patches of rushes were in full bloom. Here I secured a specimen of the true western *Hyphantica erythrops*, one of the greatest rarities in our own district. The strand vegetation is extremely poor, consisting only of reeds, Aristida, Calotropis, Datura, and Solanum.

After passing the last settlement, we struck inland. Here the ground rises in a couple of terrace-like steps, the edges of which consist of clayey soil of a reddish colour, intermingled with plant detritus and some snail-shells. These terraces, therefore, are alluvial in character, the strand being now in process of formation; the upper terrace, the edge of which lies thirty feet above the level of the lake, is, of course, the older, and the lower owes its origin to the detritus washed down from

the hills and heaped up at their foot. The path led at first between groups of dirty-looking, miserable huts; but the people have some excuse for their unsatisfactory condition, seeing that they have to purchase the long grass of which these huts are constructed, with salt, from beyond the hills. A slight bend of the path westwards, and we stood before the saltworks.

Immediately on our left rose the lofty mountain chain, and at its foot gushed forth the hot springs, to which we descended. These springs are situated in a kind of deep ravine, ending in a corrie with perpendicular walls, formed by the incaving of the hills behind. Blocks of stone and masses of *débris*—fragments of primitive rock—lie scattered about here in chaotic confusion, and, under the combined effects of heat and moisture, they have assumed the appearance of wacke. The floor of the ravine and the stones with which it is littered, are so hot that one cannot bear the hand upon them; the heat even penetrates through the shoes to the feet. On every side we heard the continuous bubbling and hissing of water, and the gurgling of gases issuing from the hot mud. Hundreds of tiny springs burst from the overheated soil, and fill the air with sulphurous gases, with which is mingled a slight smell of bitumen. The atmosphere has such a high temperature that we felt almost stifled, and as if we were in a steam bath—and this idea was further strengthened by the little jets of steam which rose on all sides from the boiling water. This "witch's caldron," in which we come face to face with the workings of Nature's forces, is called by the Wanyóro, "Kabigga." The perfectly clear water gushes out from under stones, out of crevices in the rock, and directly out of the ground. Seen in a glass, it has a yellowish tinge. In several places its temperature varies between 185° and 195° Fahr., and it gives off a slight smell like that of sulphuretted hydrogen. In taste the water is rather saline, and when taken in large quantities, it acts as a moderate purgative. It flows strongest in calm weather, wind and rain diminishing its outgush. Earthquake shocks are rather frequent in Kibíro. I saw no vegetation in the ravine, or at least none at its farther extremity; but its upper rim was clothed with thick bushes and

thorny shrubs, and between these were little clumps of an aloe, with leaves striped with white. No labour can be performed in the immediate vicinity of the springs, owing to the overheated soil and want of space. We turned our faces towards the lake, and followed the curiously winding ravine to its outlet.

As we passed along we could easily imagine ourselves in the shaft of a gold-mine; and, in point of fact, the salt is gold to all our tribes. The floor of the ravine had been levelled and cleared of all stones. The hot water was conducted in all directions in small troughs, set in and ingeniously supported on stones. Lumps of riddled earth lay heaped up ready for being operated upon. The several work-places were separated from one another by rows of stones. Women and children were busy everywhere, either scratching up the saline soil, or else filling the sieve-like apparatus. The strangest thing about the scene was, perhaps, the walls of saline earth, piled up to the height of six or seven feet, and having rows of filtering vessels at their base; these walls, when seen from a distance, look like the ruins of a village.

The method of preparing the salt is quite simple. The earth from which the salt is to be extracted is placed in the evening under the end of a trough, whence a thin stream of water trickles over it all night long. In the morning it is put to dry for some hours; after this, the women, with crescent-shaped pieces of iron, scratch off its superficial layers, and put them into other small troughs, out of which they riddle it again into small heaps. The next day a certain quantity of this earth is mixed with water, and then conveyed to the filtering apparatus. This consists of simple clay vessels, having holes in the bottom covered with a layer of fine hay; the vessels themselves stand upon three stones, and have beneath them smaller clay vessels, into which the liquid drops. This apparatus stands in rows, at the base of those mud walls to which I have already referred. When the filtration is finished, if the manufacturer is not pressed for time, he allows the liquor to evaporate in the open air; it then leaves behind it a pure white salt. If, however, time cannot be given for this process of evaporation, it is accomplished by means of

boiling within the huts; but the salt so obtained is darker in colour and less pure. The skill of the women consists in mixing the earth and water in the right proportions just before the filtering begins.

Bad weather and continued rain greatly interfere with the salt manufacture, for the soil then becomes saturated with moisture, and in that state is not suitable for the extraction of salt. At such times the people break down the sides of the ravine, for they also contain a high percentage of saline matter. It is, of course, self-evident that this continual drain upon the layers of the ravine-bottom must result in its gradual lowering. At the present time the walls have an average height of thirty to fifty feet, showing the extent to which human agency has utilised the saline deposits contained in the soil.

It would be interesting to know whether the yield of salt undergoes any proportionate variation as the ravine gets deeper; for this would decide the question whether the salt, as the native workers maintain, comes from the water of the hot springs or not. I am myself inclined to think that these springs have no connexion with the supply of salt except that of opening up the layers of earth in which it is contained. The rocks from among which the springs issue are primitive rocks; the salt itself must lie in the alluvial soil, just as it does at Rejaf and at Gondokóro. At all events, the people of Kibíro affirm that when the water of the springs is cooled by heavy rains, and the soil is consequently charged with moisture, they are unable to carry on the process for the extraction of the salt. But the same is true at Rejaf, where no hot springs exist. It is much more reasonable to suppose that the rain washes the salt out of the soil, and consequently the saline liquor is too thin to deposit much salt.

The salt of Kibíro is coarse-grained, and mostly of a rather dark grey colour, which is due to the process of manufacture. It has a faintly bitter after-taste—a fact also noticed by the Negroes.

Kabréga once sent me as a present of especial value a packet of salt of a dark grey colour, but very pure in saline properties, which he obtained from Hamgurko, on the river of Usongora (the Duëru). The bitter taste that characterises the salt of

Kibíro could easily be got rid of by a different process of evaporation and by repeated crystallisation; but the demand for it is so great that the makers need not be very particular in its preparation. The salt destined for sale is made up in cylindrical packets, and wrapped in dried banana leaves. A packet generally weighs $7\frac{1}{2}$ *ocka* (25 lbs.), and is sold for 400 cowries, equivalent in value to about 5s. 6d., for the Zanzibar Arabs in Unyóro reckon the Mejidie thaler of 20 Turkish piastres (=3s. 5d.) to be worth 250 cowries.

As already mentioned, the existence of salt here has called forth a very brisk trade. As articles for exchange which are much sought after, I may enumerate ox-hides and skins of the larger kinds of antelope, durrah and eleusine corn, iron ore and spear-heads, a little brass in thick bars, and glass beads. The last named are, however, only articles of luxury, for the people mostly prefer to buy corn with their fish, eggs, and poultry, &c. Tobacco is very dear; sheep and goats are cheaper, though of the latter only the he-goats are sold; and still cheaper are poultry, which are seldom eaten in Unyóro.

The inhabitants of Kibíro are pure Wanyóro, or Bunyóro, as it is sometimes pronounced. They have a dark-tinted complexion, are well proportioned, and most of them have intelligent countenances. Their clothing consists of that usually worn in Unyóro, viz., ox-hide dressed very soft. Bark cloth, which is very dear, and therefore scarce, is sometimes worn, as well as goat-skins, by the women. The only weapons are spears, the blades of which are covered with leather scabbards adorned with tassels. The dialect of the people varies but little from that of Mugaya, which represents that of the elegant Kinyóro. The natives of Kibíro and Bugoma speak the same dialect, which bears much resemblance to Magúngo. Each of the three villages which constitute Kibíro, has its own chief, but the head-man of the three is Kagoro, in whose village alone salt is extracted.

The health of the district is reported to be satisfactory; just at the present moment, however, there are sporadic cases of measles, the expiring remains of a serious epidemic which carried off many victims as far as to Wádelai. In many kinds of illness the people have recourse to bathing in the

hot springs, and special cases of skin disease are brought hither from the countries beyond the hills to try the same treatment.

I was agreeably surprised here to receive a letter from Dr. Junker, announcing his safe arrival in Ugánda; it is to be hoped that he will also be fortunate enough to reach home safely. Along with this, came greetings from my old acquaintance Idi, formerly secretary to Mtésa, and now a frontier chief of Ugánda; also an official communication from Nubar Pasha, and a very friendly letter from the Sultan of Zanzibar. I had, therefore, every reason to be pleased with the results of my expedition. I had accomplished the end for which I had undertaken it, viz., the despatch and receipt of letters by post.

Before starting on the return journey, however, I resolved to complete my labours by ascending the mountain chain on the east of the lake. Twelve minutes' walk from my tent, diagonally across the village, brought us to the real foot of the range. At that spot the aneroid registered 27.80 in. at 73° Fahr., against 27.85 in. at 73° Fahr. near the huts (at 8.35 A.M.) The ascent led at first over blocks of stone and sharp-edged pieces of rock, and was very steep. The narrow path was, in fact, so thickly strewn with sharp fragments of rock and stone as to make the shoes of our own manufacture a very insufficient protection to the feet. The side of the hill was quite bare; neither animals exist nor plants grow on the naked stone, which is washed clean by the rain, and baked and cracked by the fierce rays of the sun. Such was the slope up to the first terrace, where we rested in order to take bearings. The steamer lay almost immediately below us, proving that we had climbed up in a straight line. The aneroid registered 27.45 in. at 77° Fahr. The surface of the terrace on which we stood was a long flat ridge, almost destitute of stones, and clothed with a soft carpet of grass.

Above us lay the second terrace, which also was reached by a steep path, so that on arriving at the top we were glad to pause and recover breath. Here again the steamer lay immediately below us; the aneroid now gave 27.06 in. at 81°. The narrow rain-gutter, which had served for our path upwards from the lower terrace, was in several places almost barred by

diagonal crevices in the rock, which formed high and difficult steps; but worse than these were the sharp stones, which prevented us from getting a good foothold, and the thorny acacias, which made the narrow path still narrower.

Towards the summit the ascent was easier, because the stones became fewer and the ground more level. At 9.24 A.M. we reached a good road, which seemed to lead on farther in a south-easterly direction. On our left were several small dome-like summits, separated from each other by depressions, evidently belonging to the northern part of the range we had just ascended. Straight in front of us, at about half an hour's distance, another low dome-shaped eminence closed in the view, whilst on our right was yet another elevation of the same character, which we proceeded to climb. We finally rested under the shade of a mean-looking Balanite. Here the aneroid reading at 9.40 A.M. was 26.79 in. at 78° Fahr. (in the shade). This, without any correction, indicates that we were about 1150 feet above the level of the lake, which agrees sufficiently well with the altitude of 3000 feet assumed for the elevated plateau of the region lying between the lakes.

From the position we occupied, both the steamer and the village were out of sight; this, however, was due to the formation of the hills. The several terraces mount up one above the other like bastions, and are each crowned by a narrow flat ridge, whilst the steep channels already mentioned connect the terraces together. The view downwards is cut off by the projecting terraces and the close thickets and bushes growing on the lower slopes. Away in the west, on the other shore of the lake, the lofty hills of Londú were wrapped in mist. Close to the edge of the hills, on our right, a narrow sandy cape ran out into the lake, bending round at its extremity on both sides like an anchor. This, too, was evidently of quite recent formation, for it bore no vestige of vegetation.

All the summits of the hills are covered with Anthistiria grass, which serves as food for the sheep and goats that are brought up here to graze when they can get nothing better. A species of *Scabiosa*, with whitish blossoms and very pleasant smell, also abounds, but trees are few and low—such as some yellow-flowering acacias, Balanites, Zizyphus, Grewia,

and shrubby bushes of Carissa, smelling like jasmine. In addition to these, I observed several aloes, a low hibiscus with brimstone-coloured blossoms, some low Solanaceæ, and a pretty Polygala. Above our heads circled a species of eagle (most likely *Aquila Wahlbergii*), whilst in the bushes and on the stones we saw turtle-doves and pipits (*Anthus*). Here a number of people with burdens, mostly of firewood, on their heads, passed us on their way down the mountain.

At 9.45 A.M. we began the descent, which was quicker, but not pleasanter, than the ascent, being made in twenty-nine minutes. At 10.20 we reached our huts. Here the aneroid now read 27.81 in. at 84° Fahr., consequently 1 mm. less than the reading taken when we set out.

Although there was now nothing to prevent my departure, I nevertheless, at Kagoro's request, consented to stay a day longer. Towards evening that chief came with a budget of compliments and a few eggs by way of a present, excusing himself for not bringing more on the ground of bad times and short supplies—a sure means to enhance the value of his gift. On getting the pet wish of his heart gratified, viz., the present of a pair of shoes, he took his departure in high delight. With a little patience and goodwill, Negroes are so easy to please!

Before leaving, I took a walk to the little brook close by, going along the shore towards the south. At this part the shore is broad and sandy, sloping gradually into the lake; on the landward side it rises into dunes, but falls away again beyond them. The vegetation is identical with that described above. After thirteen minutes' walking I turned away from the lake, crossed the sandy fringe obliquely, and soon reached a tract of open wooded country, the trees being mostly acacias, covered all over with the nests of the weaver-bird (*Hyphantornis abyssinica*), beside which the twittering males were keeping watch. In the neighbourhood of the brook the vegetation becomes richer and more plentiful. The brook itself, which bears the name of Kachoro, is nearly six feet wide, and in level places about a foot and a half deep. At the time of our visit it had inundated a large part of the land adjoining it, and formed several pretty little cascades, and pools of still water rest-

ing on a sandy bottom. It issues from a mountain ravine, and has clear cold water all the year through. This alone is used for drinking by the people of Kibíro, for they state that the waters of the lake are salt—a belief which finds credit with our Arabs here, who call the lake Bahr-el-Mālakh, *i.e.*, salt-lake. The only real difference is this, that the water in the lake is soft, and always a little warm.

On my way back I noticed in the tall grass a great number of cylindrical fungi, about 1.6 to 2.0 in. high, and $\frac{1}{8}$ in. in diameter. The crown consisted of a small brown closely-set cap, often punctured with holes; the stalk was smooth, and pale yellow in colour. The whole of the frame was shiny, and gave out the odour of rotten fungus. From the troughs in the saltworks I captured some specimens of the pretty little plover (*Ægialites pecuarius*), which frequents them in numbers, and on the lake-side a beautiful *Buteo augur*, var. *nigra*, which was busy catching mice—both birds being novelties in our country. I also procured some specimens of a tick, called by the Wanyóro *bilbo*, which is greatly dreaded by Negroes, and, to judge from the size of the creature, their fear is not ill grounded. They employ a curious remedy against its attacks; a scale of the pangolin (*Manis* sp.), calcined and pulverised, is mixed into a salve with fat, and the preparation is then applied superficially. *Ocymum canum* is also useful for the same purpose.

By noon we had all our baggage on board and steam up, and with a strong south-west wind, which whipped the lake into short white waves, we started on our return journey. The steamer was full of sheep and goats. Every one of my people had been eager to purchase these animals, as well as salt and tobacco; and in order to encourage them in this commerce, I had given them some ox-hides and a quantity of cowries. We soon left the villages of Kibíro behind us, steering parallel to the uninhabited foreshore towards the north, where the hills appeared to be quite as lofty and as steep as at Kibíro. The western shore was again enveloped in mist.

Our little boat rode gaily over the waves, but when we got about a mile and a quarter out into the lake she began to roll so much that the majority of my people were again helpless with sea-sickness, and most of them did not raise their heads again

until towards evening, when we neared Boki's village. We were soon so far from the eastern shores that it was impossible to sketch the contour of its banks. About one o'clock the hills on the west began to peep through the mist. Our course was almost a straight line towards the north-north-east, but the strong cross wind kept us back somewhat. Towards three o'clock we came in sight of the island of Tunguru, but we kept to the open lake, and could now distinguish the eastern shore again, as well as the chain of hills that curves away towards Masíndi. Throughout this course, and also off Kibíro, we saw no traces of Pistia rosettes either on the shore or on the lake, whereas the whole of the west side is full of them. At four o'clock we passed the island. Gradually approaching the west shore, we steamed past the wood, off which we had spent the stormy night on the outward journey, and where we now saw large fires burning, which gave us a fine evening illumination of both land and lake. About 5.32 P.M. we once more cast anchor before Boki's village of Fanyumóri. The way home to Wádelai was the same as that by which we came out.

III.

THE MONBUTTU COUNTRY.

1. A Visit to the Monbuttu (1883).

(*Written at Ladó, November* 1883.)

THE WELLE AND THE KIBALI—A DESCRIPTION OF THE STEPPE—ANCIENT CULTIVATION—WOODED "SINKS"—RESULTS OF DENUDATION—THE ARCHITECTURE OF THE MONBUTTU—THE ORIGIN OF THE MUNDU—FOOD—AGRICULTURE—CANNIBALISM—THE "BUSHMEN" OF THIS DISTRICT—AKKA ARMS—THE MONBUTTU FORESTS—YANGARA'S PALACE—TRIBAL MIGRATIONS—THE ELEMENTS WHICH COMPOSE THE MONBUTTU PEOPLE OF TO-DAY—MONBUTTU WOMEN—ABUNDANCE OF INDIARUBBER—DISTRIBUTION OF ANIMALS—IRON ORE—OUR RAPID RETURN.

At noon on the 16th of June 1883, after a long and tiresome march through the grassy waves of the sun-scorched steppe, we stood at last on the brink of the Welle, the large river which rolls its waters towards the west. It is enclosed in steep clayey banks and edged with lofty trees. The breadth of the stream and its freedom from all reeds and from old-river-channels give a youthful aspect to this "Son of the Mountains." One could not help wondering whence the mysterious river came and whither it went. Dr. Junker's extensive and splendid exploring work has left hardly a doubt as to the connexion of the Welle with the Shari, and has been a great step towards the solution of the latter question.* The former, however, remains undecided, the more so as the A-Mádi of Lógo, whose mountain territory is divided

* This doubt appears to be now removed by the discovery of the great tributary of the Congo, the Mobangi, by Mr. Grenfell, and by the latest discoveries of Dr. Junker.—F. R.

by the river called by them the Obbi, declare that the Kíbi is only a tributary of the Kibali, and that this river comes in a long sweep from the south-east.

I have spoken of the Welle and Kibali; it may, therefore, be advisable to explain these names here. If a traveller comes from the north accompanied by A-Zandē interpreters, and asks them the name of the river, they call it Makwa, an appellation which it retains as long as it flows through the territory of the A-Zandē. Besides this name, however, the word Welle, which signifies "river," "stream" *par excellence*, is in general use among them, but is entirely unknown to the Monbuttu, who call the Makwa, where it traverses their country, simply Kibali (also meaning "stream").

We gained the southern bank in a swift canoe, and there entered Monbuttu proper, the wonders of which I had long wished to see. But the first march, as far as the village Nédada, situated an hour's journey from the river, afforded nothing of particular interest. After climbing the somewhat steep slope of the river-bank, the road led us through a steppe covered with gigantic grass. The light grey soil, intermixed with an abundance of vegetable ashes, lies on a substratum of sharp granite fragments, and is therefore unable to retain sufficient moisture for the development of tall-growing vegetation. What trees exist are low and have thin stems, but they display a greater profusion of foliage than is found in the north; this is particularly striking in the Vitex and Sarcocephalus, which are extremely common. "Gallery" woods skirted the brooks, but even these contained no tree of any great size. The little village presented in contrast a very pleasing appearance. Round a clean open space, in the centre of which were rows of juicy, green, young manioc-stalks, the huts, with their tall conical roofs, formed a large circle, bordered along one-half of its circumference by the Naponga brook, its wooded margin forming a charming background to the light grey soil and fresh straw-coloured huts. The inhabitants of the district adjoining the river are Mari, a Momvú tribe, who at the present day use the same language as the Monbuttu, and resemble them in appearance. Dwelling by the river-side, in villages lying far apart, they attend chiefly to the ferries, but also engage in

fishing, in hunting the hippopotamus and crocodile, and, to a very small extent, in agriculture. Of course there was no trace of cattle; neither were dogs to be seen. As the inhabitants had retired, leaving us their empty huts, it was impossible to learn anything further about them or to get any information about the country. Our zoological gains were also small, being confined to some handsome spiders and a graceful prickly mole.

The elevation of the ground on the other side of the Nédada somewhat changed the aspect of the country, and though the steppe continued for some time, the appearance of bog iron proved that we were on the ascent. As soon as we reached the Zinwe brook, and descended to its "gallery" wood, we saw harbingers of another vegetation in the pretty fronds of the Raphia palm. The steppe shrank in proportion as the brooks and threads of water became more numerous, and the vegetation developed an astounding luxuriance. As far as the Numa rivulet, it had been confined to the bottom-lands, but from that rivulet onwards another feature made its appearance. The whole of this region must have been formerly cultivated, to judge from abandoned banana plantations and manioc grown up as high as trees. When the villages were deserted, the fields ran wild, and became covered with a multitude of plants, which grew up vigorously in the loosened soil, and filled up all the intervals, so that one has now the rare pleasure of marching along a narrow path between uninterrupted walls of vegetation, in which cultivated plants rival in luxuriance the proper children of the woods. In the midst of this mass of trees and plants, small clearings were formed, full of huts and sheds, and here groups of women were following their household occupations, generally surrounded by numerous children, in which the Monbuttu seem to be particularly rich. Three stones placed upright formed the hearth; a big-bellied pot bubbled over the fire, but what it contained—whether the fatty larvæ of beetles or monkey flesh—we were not able to learn. Large numbers of extraordinarily small fowls, mostly white, paraded round the huts in the banana and manioc plantations, and here and there a liver-coloured dog of the small Zandē breed yelped; on all sides the song of birds resounded: an idyll in the land of

cannibals. It speaks well for the security felt in the country, and the rare appearance of beasts of prey, that all these compounds scattered in the wood are free from any disturbance, and the isolated huts, which have boards placed against the entrance, thus forming a door, need them chiefly for protection from the cool air of night.

Every step towards the south and west unfolded new pictures; splendid woodland scenery, swamps and jungles, where the overpowering beauty of the vegetable world concealed the difficulty of travel, *zeríbas* and villages, clearings for new crops, banana plantations and yam-fields, streams and brooklets on every side. The country rose more and more when we had passed through Negúnda, where Mbaga, Gambari's brother, lives. Blocks of granite cropped out on the numerous hills, which must be regarded as the remains of ranges that have been washed away, and the paths down to the brooks gradually became steeper. It is curious to march through a narrow strip of steppe land, and become all of a sudden aware of a dark row of what appear to be dwarf trees lying on the ground, then, coming nearer, to find a descent of from sixty to a hundred feet, and the dwarfs changed into very giants, for they are rooted in the depths below, while only their tops are visible from the level of the plain. The frequent landslips also deserve mention. The farther one pushes in Monbuttu towards the west, that is, in the direction in which the country slopes, the deeper grows the stratum of reddish-brown mould which overlies the clay and the bare rock; the more luxuriant, too, becomes the vegetation covering the ground, and the more rapidly proceeds the formation of humus produced by its decay. As this loose soil is, moreover, soaked with water throughout the year, small causes, such as the fall of a tree, are capable of producing a gap, and once a point of less resistance has been created, the erosive action of the water flowing towards it from all directions accomplishes the rest. If the water has once succeeded in forcing its way out, the original hole becomes transformed into a ravine, which grows wider and wider as the process of disintegration proceeds, and deeper and deeper, through the excavating action of the water flowing along its bottom. When vegetation has taken possession of the slopes, we have one of those innumerable threads of water with

which Monbuttu is covered as with a net. If, however, the first fissure occurs in a place where there is not enough water to accomplish the process just described, the hollow, which, to begin with, is usually round, becomes deepened by rain falling into it, and widened through the slipping in of its edges; and if then, in course of time, trees grow upon the bottom of such a "sink," the curious sight is to be seen of a wide, deep caldron, its bottom covered with trees whose tops reach exactly to the level of the surrounding country.

In considering the characteristic features of this country, it is necessary to mention the little hills, isolated or standing in groups, which are very numerous where the country slopes towards the rivers and brooks. They are light grey in colour, generally fifteen feet high, of conical or truncated pyramidal form, and often of considerable breadth, sometimes entirely grown over, but usually bare. One would certainly put them down as great termite hills, if it were not that the natives build their huts upon them, and that a careful examination has failed to reveal the existence of passages constructed by ants. It therefore appears as if we had to deal here with a question of the product of denudation, and this view is borne out by the existence of similar hills on the lower and middle Bahr-el-Jebel. At any rate, these miniature mountains add not a little to the beauty of the landscape, especially where three or four of them covered with huts are scattered amongst a *zeriba*.

Accompanied by a very large crowd of people, and by the deafening noise of huge horns carved out of elephants' tusks, we reached the village of Jondi; its numerous huts were scattered over the ground which sloped down to the Bogboro stream, and were surrounded by a wood of Scitamineæ. Plantations of oil-palms became more frequent from this point, and lent a charm to the village, which was also rendered attractive by its picturesque hall-like buildings, and by the cleanliness and obliging manner of its inhabitants. The walls of many of the buildings were ornamented in quite a peculiar style; long strips of bark (*Xilopia æthiopica*) were fastened to the reed walls and sewn together with split rattan, covering the entire wall and having the appearance of mosaic. The open space situated in the centre of the

village contained the meeting-hall, which looked particularly pretty; it provided ample room for three or four hundred men, and, differing from similar Monbuttu buildings, it had a hemispherical roof supported by fifty high wooden pillars. One is at a loss to know whether most to admire the boldness of conception—for we are in a Negro country—or the precision of execution of such architecture, which is, indeed, only to be found in lands such as Monbuttu, where building materials in bamboo, rattan, ribs of palm leaves, and straight-grown trees lighten the task of the skilful workman.

We had hardly time to look about, for the rain was threatening; and when, after an hour's march, we reached Gambari's residence, Bellima, we scarcely managed to get our loads under cover before a deluge of rain came down. This is the commencement of the rainy season, and it seems as if it must rain at least twice daily; what, then, will be the humidity of the atmosphere later on? No long series of meteorological observations have yet been made in Monbuttu; from what the natives say, however, it seems that there are two distinct rainy seasons, although no month in the year is absolutely without rain. It is interesting to note that although the south-east wind usually brings the rain, it frequently falls also during the north-west wind.

Bellima is situated on the back of a ridge of hill running along the northern bank of the little river Gadda, and is the highest place we visited in Monbuttu. While the thick forest shuts out all view between the south and west, a row of stately mountain forms appear, running from south to east, among which is conspicuous the imposing form of Jebel Tinna. The most northerly of the two groups is called by the collective name of Mimi, after a little station which was once situated there; the easterly group is called Gango. Both of them are doubtless the last spurs of the chains that stretch from the south end of the Albert Lake, across the country of the Loggo and A-Mádi, and trend away towards Monbuttu. All the rivers flowing through Monbuttu—Makwa, Bomokandi, Nava, and others, excluding perhaps small and local brooks, rise in those mountains; and the great abundance of water in Monbuttu may perhaps be explained by the fact that the country lies just

at the foot of that high land and extends parallel to it, receiving at first hand the total rainfall from two rainy regions. If we remember, too, that the moist south and south-west winds blowing from the Congo basin precipitate all their moisture upon these mountains, that numerous large streams accumulate within a small area, and evaporation is prevented by the abundant woods, we shall cease to wonder at the immense amount of water in the country. The high undulating district around Gambari's village is very thickly populated, yet the *zeríbas* hardly strike the eye, because they are situated in clearings in the woods or are shut in by high reeds, through which only narrow footpaths wind.

Except the servant class, which in Monbuttu is chiefly recruited from Momvú, the inhabitants belong principally to the race of Bamba, called by the A-Zandē, A-Bangba (Schweinfurth's Abanga), and appear to descend from the original inhabitants of the country; they have a language of their own, but have adopted the customs as well as the speech of the ruling classes, and are now just as good cannibals as the real Monbuttu. According to their own account, their nearest tribal relations are the Mundu of Makraká, who no doubt were separated from them by the immigration of the A-Zandē and driven towards the north. Some members of the Mundu tribe who had accompanied us were received in a very friendly way by their ex-countrymen, and conversed with them in a language totally different from the Monbuttu. The Mundu of to-day are an exceedingly industrious agricultural people, and one hears, in Makraká at least, nothing of cannibalism, although the near neighbours of the Mundu, the Babúkur, who also came from the south, where they are known as Mayanga, have remained true to the horrible custom of their homes. However, since I have seen the eagerness with which the Bombe of Makraká, who belong to the Iddio division of the A-Zandē, offered to clean skulls, the matter appears to me rather suspicious, and I am inclined to state that the Bamba as well as the Mundu still hold to their old customs, and continue them in private. Apart from this, the Bamba are friendly, pleasant people, clever and handy, and they possess a very good eye for neat-

ness and symmetry; to this their roomy huts, their stools and forms, as well as their ironwork, bear witness.

There is naturally not much here that can be termed agriculture; unless, for the sake of euphony, one can call the planting of bananas, manioc, sweet potatoes, Colocasia, occasionally yams, and much tobacco "agriculture." Nature has distributed her gifts so prodigally over the land, and made the maintenance of the individual so easy and free from toil, that methodical work is unnecessary. Indeed, it is just this that is the cause of the standstill in the social development of the people. The only species of corn which are brought under cultivation are maize and eleusine; the former is found almost everywhere and in great quantities, the latter only in the eastern part of the country, and there only to a limited extent. The banana is everywhere the staple food of the people, and every variety of it grows here. Fresh and dried, green and ripe, for cooking or made into wine or beer, it is always the favourite fruit. Cattle do not exist here; even sheep and goats are only to be found in the Mabode country—I saw some fine goats from there. Flesh is therefore an article of luxury, be it that of a fat guinea-pig, of a dried-up ape, or of a deceased relative. Ever since the invasion of the Arabs, cannibalism has been carried on with the greatest secrecy, at any rate in the neighbourhood of the stations, and the good old times have long since passed by when one could buy for copper rings as many skulls as one desired. It was only with the greatest difficulty that I managed to procure an almost complete Akka skeleton and a few skulls. It may be quite otherwise away from the stations; at any rate, the following incident proves how deep-rooted this evil custom is amongst these people. When I asked an Akka, who had lived many years in our stations in the north, and who was returning home to Monbuttu, whether he was glad to go home again, he said without hesitation that he had long since become tired of "beef."

On the southern bank of the Gadda I found that a little band of Akka were temporarily established right among the Momvú who cultivate Gambari's fields. As I have previously given some account of the gipsy life of these pigmies of the

woods, who here correspond to the bushmen of the south, I need not repeat myself, but will only correct an error into which even experienced explorers and collectors have fallen. The Akka have neither lances nor spears, but make exclusive use of the bow and arrow, and the so-called Akka lances which have been sent to Europe are either the long Mabode or the short Momvú weapons.

Our stay in Bellima was rendered somewhat unpleasant by constant rain, but the little spare time I had after my official duties were accomplished, was completely filled up indoors with making anthropological measurements, collecting notes, making vocabularies, and preparing and conserving specimens. The early morning hours afforded me, however, rich and interesting zoological spoil, but the prevailing damp was a great drawback —never mind, a new district lies before me.

The march from Bellima to Tingazi, or Tingazizi, as its inhabitants call it, can be accomplished in three rather long days, that is, supposing that the two streams which have to be forded do not either block the road or flood the land. We had, however, no trouble of this kind, but Gambari had taken it into his head, doubtless for some important political reason, to lead us right through desert and primeval forest, avoiding all the villages, and although this gave me the opportunity of becoming acquainted with a good specimen of unadulterated African scenery, it caused us an extra day's march.

I have mentioned woods so often, that it may be well to explain what I mean by them. It is a mistake to imagine that on entering Monbuttu from the north you will immediately meet with dark impenetrable woods. Magnificent "gallery" woods, in which all the marvels of vegetation unfold themselves before the enchanted gaze, often border to a considerable distance even the smallest brook. Every declivity in the ground is covered by trees and bushes, and on the old clearings and the cultivated spots, Flora's wild and cultured offspring are mingled, forming often completely impenetrable walls. The region, however, of immense forests, in which one may wander for hours without seeing a sunbeam, and where one hears the rain beating upon the summits of the trees without feeling a drop, commences only a little to the west of the A-Zandē

district, ruled over by Chief Kanna. I have seen such stretches of primitive forest in Monbuttu, and there is no doubt that this country was originally quite covered with forests, to judge from the remains of virgin woods which still exist. The gradual disappearance of the forest is to be attributed to the comparatively thick population, the constant removal of villages and fields, and to the inroads of both axe and fire. When I have seen the relics of ages long past, the gigantic frames of trees, thrown across the way, having been cut down and given over to decay because "they spread too much shade over the crops," I have felt that Nature herself was profaned. After many years of wandering through these regions, I am inclined to think that in ancient times the true Central African forest region, that is, the permanence of closed woods containing westerly species, extended much farther to the north than it does to-day. Towards the east, as far as the district of Janda, I have observed such curious species as Artocarpus * and Anthocleista, whereas the valley of the Bahr-el-Jebel throughout its whole length, as far south as the lake, points to steppe vegetation, as also does the entire eastern district of our provinces.

The continuous descent of the road to Tingazi shows that the country slopes towards the west; the plateau on which the small station of Maigo is situated alone rises a little above the surrounding country. The Arabs have named this place Kala'at-el-Homr ("the red hill"), on account of its being covered by a strata of red bog ore; it forms a rich mine of iron, which is much used and valued in the country. At its summit are several large pools of rain-water, deeply sunk into the iron-stone, which here presents the appearance of a rocky crust; they are surrounded by short green velvety cushions of Selaginella, upon which hundreds of little frogs assemble, while nimble sandpipers with nodding heads listen to their concert. An hour before reaching Tingazi, Nenja, the residence of the Monbuttu prince Yangara, was passed; it is situated upon a high hill, and commands an extensive view. In

* True Artocarpus does not exist in tropical Africa. The writer refers to *Myrianthus*, a species of this family also found in western tropical Africa; the African Trumpet-tree (*Musanga*) should be mentioned in connexion with this subject.—G. S.

the central open space of this village there are some fine buildings, several of them with open sides, and serving as meeting-places, others with walls made of pieces of bark, and in use as private houses. Round about the space were grouped the servants' huts. The prince's *zeriba*, enclosed by a strong fence of palisades, lay somewhat to the side, and consisted of comparatively few huts, occupied by his favourite wives. As in other Monbuttu villages, there were spaces set apart expressly for cooking operations; these are not found among other Negro tribes. Near the principal door leading from the prince's *zeriba* to the square there is a small secret door, intended to be used, in case of need, for flight into the neighbouring "gallery" wood. The Monbuttu princes are no heroes; they take to heart above all the command to "be fruitful," &c.

Tingazi, the present capital of the country from an administrative point of view, lies in the worst possible position between the "gallery" woods of three streams, on ground swarming with termites. The damp during my short stay was so great that the wet and dry bulb thermometers at 7 A.M. usually showed only a difference of 0.9° to 1.80° C., and at 2 P.M. the variation was hardly 5° to 7° C.; this great humidity probably continues for a considerable part of the year. It is easy to understand that under such circumstances even my double tin-cases hardly sufficed to protect my collections.

In Tingazi the population is chiefly composed of Bambad, who previously (in Schweinfurth's time) resided much farther north of the Welle, but who were gradually driven more and more to the south on account of the constant A-Zandē migration towards the east, which migration continues to the present day. Among the Bamba I noticed many Nyapú, another of those aboriginal races which help to form the conglomerate population of Monbuttu. Without extensive philological research, it is difficult to distinguish the original inhabitants of the country from the immigrants—the Monbuttu—and, on the other hand, to determine the various constituents of the former and the real origin of the latter. If one makes inquiry in the country about the component parts of the Monbuttu people, one is given a long row of names, such as Meaje, Mabisanga,

Mabode, A-Bárambo, Nyapú, &c., of which a large proportion have as little claim to being real Monbuttu as the Momvú, the Lógo, and other of their neighbours. And yet to-day all the tribes just mentioned are so firmly cemented together by intermarriage, intermixture, habits, customs, and even language that they not only acknowledge themselves to be subdivisions of one Monbuttu people, but also feel themselves to be so. The fact, moreover, remains—and there are a number of similar ones in our country—that the Monbuttu language proper has, to a large extent, replaced the original language, and that the people, who neither are Monbuttu, and who do not appear to be related to them, have acquired their habits; this must be borne in mind when examining the ethnology of the country.

I would like to add another remark bearing on this subject. In the collection of what are called typical skulls, very great care is necessary. It is well known that skulls are of no value if collected within reach of Arab settlements, or in the borderland of two tribes, but one has also to be most careful even in the centre of a district belonging to any one tribe. The intermingling of separate tribes and peoples in Central Africa consequent upon war, plundering raids, dividing of the spoil in women, slavery and exchange of slaves, and in a much less degree on intermarriage, has brought to pass such a state of confusion, that it is almost impossible to obtain skulls of really pure race. Dr. Schweinfurth gives an instance of a Zandē who was introduced to him as a Bongo chief. In the centre of Unyóro I found a large number of Wagánda women. During my stay in Ugánda hundreds of women were brought into the country from Usóga and distributed through the land, and as expeditions are sent there annually, and the Wasóga do not appear to be of Bantu origin, the constant crossing must in the end have a decided influence. Whether the great variation in the colour of the skin observable among all Negro tribes is to be attributed to these mixed relationships I do not venture yet to decide.

Since the scientific discovery of Monbuttu, the habits and customs of the people have hardly changed at all, in spitè of the Arab invasion. One man here and there may have learnt to clothe himself in rags of stuff, and to hang a rosary round

his neck in the presence of Arabs, but the latter have exerted no palpable influence on the physical and moral condition of the people generally. There is not even any progress visible in the implements of wood and iron used for the cultivation of the soil, and yet I repeatedly came across saws, files, &c. The fault, then, probably lies on the part of those who have been too idle to teach the people. I have no doubt at all that, with very little trouble, one could make the Monbuttu into exceedingly clever workmen; but this can only be accomplished by men who do not hold work to be degrading, not by those who, though acquainted with the art of weaving, allow the cotton to rot in the fields, and prefer to clothe themselves, like the Negroes, in bark cloth or skins. I would also mention another excellent point about the Monbuttu, which is, that drunkenness seems to me to prevail less among them than elsewhere; unfortunately, they have learnt the secret of the manufacture of brandy, but I have not seen any drunkenness.

It would be an injustice not to refer to the fair sex, who play such an important *rôle* in Monbuttu, and are the cause of all the misfortune from which the country suffers. At the very beginning of the invasion, the intruders seem to have found pleasure in the daughters of the land, and those at least who remained in the country married there according to the native customs, after paying a small price for their brides. The first dissensions arose as a result of this intermarriage, some of the invaders wishing to take their wives out of the country; and the war against Munza, which cost him his life, and created an entirely new state of affairs in Monbuttu, was undertaken on account of a woman whom Munza refused to give to an Arab. As far as I had opportunity of seeing and getting to know Monbuttu women, I always found them very decent in their behaviour. Their dress certainly would hardly be permissible for church-going; but, for the rest, they are said to be affectionate and teachable, and therefore favourites with the Arabs. A surprising number of them have light yellow, almost Egyptian, colour of skin; these are not pathological phenomena, like the albinos, but perfectly normal individuals, with a light fundamental pigment. Such women are particularly admired, and I must confess that their appear-

ance in the midst of their more dusky sisters does take one rather by surprise. Children of Monbuttu women and Egyptian or light-coloured Berber fathers have a yellow skin, while those of the same fathers by A-Zandē mothers are light copper-red, and if by Bari, Dinka, or Mittu mothers they are blackish-brown.

The remarks I have made above apply also to the neighbourhood of Tingazi. The soil is rich and productive, and where the termites permit cultivation, a harvest of maize can be reaped three times in the year. Nevertheless, no one thinks of a systematic cultivation, for there are bananas and maniocs in abundance, and the forest affords, besides, large quantities of fruits. Conspicuous among the latter is the orange-coloured fruit of an Anona, of a sweet-sour taste; also the beautiful pink cola-nuts, which are very abundant, the cone-shaped fruits of caoutchouc tendrils, the gourd fruits of two kinds of Artocarpus,* the peach-like apple of the Myristica, which grows also in Ugánda, various kinds of Amomum, and many other fruits.

There is but little cattle, and the sheep and goats are mostly brought from the south, where large herds are said to be kept upon the wide plains of the Mabode country. I was assured by the prince Sanga, one of Munza's brothers, that Munza's cows, mentioned by Schweinfurth, came from the neighbouring country of Lógo, where, no doubt, there exist large herds. The name "Maoggu" is identical with Lógo, *ma* being the Monbuttu plural article (Maloggo). The salt to be seen here is not brought from the west, but from the Mabode country. I saw some large perfectly cone-shaped pieces of it at Gambari's, which had been sent to him by his brother Arama. It is tolerably clean and white, but has a slightly bitter after-taste, which could be got rid of by repeated evaporation. Among the various products, caoutchouc is destined, if developed in a natural manner, to become the greatest source of prosperity to the country. Great quantities of it could be obtained with a little trouble and a few presents; and since I have shown the natives how to thicken the milky juice without the addition of water, in order to prevent the formation

* See note on p. 195.

of cavities in the interior of the pieces, the quality of the product was become in every respect faultless. Samples of palm-oil were collected to send to the north. The further cultivation of this product is to be attempted in Makraká.

A residence of nine days filled in with official occupation is naturally insufficient for the acquisition of exhausting notes concerning a country and its inhabitants. As, however, both the geography and ethnology of this country have been worthily represented through the industrious work of Junker and Casati, I was all the more anxious to devote every free moment to collecting, in order at least to obtain an insight into the hitherto totally unknown fauna of the land. If Dr. Schweinfurth's botanical researches had already proved that, in regard to vegetation, Monbuttu forms the transition from the north-east African region to that of tropical west Africa, the supposition still needed proof as far as concerned its fauna. Schweinfurth's list of animals certainly contains *Troglodytes niger* and *Potamochœrus penicillatus*, but the rest are animals of much wider distribution over the continent. Though I may not have succeeded in enriching this list very largely, there are at least indications to be derived from the discovery of an entirely black Cercopithecus, which occurs in addition to *Cercopithecus sabœus*, a small Galago, an Anomalurus, an Atherura, a new genet, a flat-tailed squirrel, and quite a large number of other new Rodents. Birds are even more abundant. Forms of so decided a character as the Turacus, Musophaga, Corythaix, Amblyospiza, Spermospiza, Tricholæma, and several Trichophorus, as well as quite a list of Nectarinidæ unknown in the north, determine the ornithological position of the country. As the same holds good in regard to the amphibians and reptiles, and also, though less completely, to the Lepidoptera which have been collected, I believe I may be permitted to hold that Monbuttu, both in respect to its fauna and flora, presents a transition to the tropical west, the "West African sub-region of Wallace." The presence of north-easterly and easterly species is occasioned by the steppe zone extending into the proper forest zone. Further investigations will help to fix exactly the line of demarcation in special regions.

I was not able to learn anything of Monbuttu's possible

mineral riches. The presence of such is, indeed, hardly to be expected, at least to judge by the geological formation of that part of the country which up to the present time has been occupied. Iron is obtained, as in the surrounding districts, from bog ore, and in the form of plates it serves as an article of barter. The presence of metallic iron—the Negroes assert that it is meteoric iron *—at Jebel Tinna, or Tenna, was previously reported, and samples of it were sent to Europe. I may just note in passing that there are vague reports of the presence of coal (brown coal?) in the south-east. But so long as the Egyptian Government does not interest itself in an exploration of the land to the east and south of Monbuttu, perhaps as far as the Congo (really not a difficult task), many weighty questions regarding this country will remain unanswered. May the near future bring us a better prospect!

Further investigations were rendered impossible by the late season of the year and my desire to pass through the Lógo district before the occurrence of high water. On our return journey to Gambari's headquarters we had found all the rivers very swollen and many flooded, so that a two days' stay at Bellima, where we had to wait for porters, had been a well-earned rest. Unfortunately, bad news reached us here from the north, so that we were compelled to retrace our steps just when we had reached the entrance to the unknown, to give up all the enticing projects of a journey towards the east, and to choose at once the most direct path to the north. Accordingly, we took the old road from Bellima to Mbaga's village, Negunda, where a new station is to be built. From here we struck a new path, which brought us to the confluence of the Dongu with the Kibali. The configuration of the country was very monotonous, but we passed two rocky mounds called Mellu. The descent towards the river on the other side of these rocks presented a striking change in the character of the vegetation. The plants were just like those seen on steppes, large-leaved and leathery, and there were no high trees. The rapid

* The stone is hæmatite. Concerning the stone axe which came from Jebel Tinna, which was made from that stone by a totally different race to the one inhabiting Monbuttu, the reader will find information in the "Zeitschrift für Ethnologie," vol. xvi., Verhandlungen, page 294.—G. S. and R. ANDREE.

drainage down the sloping ground causes periodical droughts, and the ground near the river is much more sandy and poorer than that lying farther away. The inhabitants become more sparse the farther one proceeds towards the north, so that one is prepared for the broad uninhabited grass steppe of the A-Zandē country on the other side of the river. On the 18th of July we arrived opposite the confluence of the Dongu, precisely a month from the time we first crossed it, and we said good-bye to Monbuttu, sincerely hoping for a speedy return.

2. Notes on the Monbuttu.

ORIGIN—ABORIGINES—BAMBA—MOMVÚ 'AGRICULTURISTS—POLITICAL ORGANISATION—FOOD—CANNIBALISM GENERAL—SMOKING—COLA NUTS—BEER AND WINE—MATRIMONIAL—BIRTH AND BURIAL—THE FAIR SEX—CLOTHING—DANCING AND MUSIC—CIRCUMCISION.

The Monbuttu occupy an entirely unique position among our Negro races in regard to bodily constitution and mental characteristics. They say that their ancestors came from the north-west, passed on their march a great lake or sheet of water having no outlet, remained there for a time, and at last reached the Kibali, on the north bank of which they took up their residence for a long period. After a time, small bodies went over the river, and having increased in numbers, they proceeded to conquer the country, and compelled the A-Zandē, who were pressing in from the west, to deviate from their line of advance. Friendly relations between these two people seem never to have been established, the Monbuttu always considering themselves superior to the A-Zandē, and never willingly giving them their daughters in marriage. The original inhabitants of the country bordering the Kibali are said to have consisted of different tribes, without any proper rulers, such as the Momvú, the Abarambo, &c., who, although partially assimilated, still hold an inferior social position. Even at that period the Akka led the same roving, hunting life which they still follow.

The chief Monbuttu tribes are as follows:—Meaje-Majó (fifteen tribes), Maudú, Mabisanga, Majó, Bamba, Mabōde, Mamberé, Nyapú, Abárambo, Abre, Mberi, Bote, and Mayanga. They now speak the same language, although perhaps different dialects, but some of them at least have languages of their own. The Mabisanga are credited with having been the first to cultivate the oil-palm, which they introduced from the south-west.

The Bamba and the Mayanga have a special interest for us. The former are found again in the Makraka district as "Mundú," and there speak their own language, which differs entirely from the surrounding Makraka idiom. The A-Zandē call them Abangba, and I am inclined to identify them with Schweinfurth's Abanga. It is remarkable, however, that a long residence in the Makraka district should have transformed these cannibals into industrious tillers of the soil. The Mayanga, too, are already known to us, for they are identical with the Babúkur, who live on the western border of Makraka, and in the Bahr-el-Ghazal district, and are still dreaded cannibals. We have here, therefore, to do with two southern tribes, whom the Zandē invasion not only cut off from their kinsmen in the south, but drove far to the northward, where, up to the present day, they occupy an isolated position in the midst of other tribes.

The Momvú, who are smaller and considerably blacker than the Monbuttu, are found as servants in the households of the wealthier Monbuttu. Almost all agricultural occupations devolve upon them, and both sexes enjoy a high and well-merited reputation as field-hands. They occupy large territories to the east and south-east of the country, where agriculture flourishes, but their possessions are plundered by the Monbuttu *con amore*, especially when they are wanting meat.

The constitution of the Monbuttu is an extremely simple one. The great chiefs are hereditary dignitaries, the royal power descending from father to son, whom the younger brothers are bound to, and usually do, obey. If there is no grown-up son, the brother or next male relation succeeds; this arrangement also holds good during the minority of heirs proper. Instances are said to have happened in which the

substituted brother of the deceased so ingratiated himself with the people that he remained in possession after the majority of the real heir, who only received his honours at the death of the regent. It also sometimes happens that, should there be several brothers of nearly the same age, the popular voice decides that not the eldest but the cleverest and most respected of them shall ascend the throne, and this is arranged without war or the shedding of blood. The rejected candidates retire quietly into private life, and as a matter of fact the relations of chiefs differ in no way from the rest of the people. The sub-chiefs were originally appointed by the ruler, but as they are not dismissed from their posts unless well-founded complaints are made against them, and are even allowed to remain in office on the accession of a new ruler, who thus gains their support, they virtually constitute an hereditary nobility. At the same time, the right of the ruler to appoint his sub-chiefs and to dismiss them is fully admitted. Individuals who greatly distinguish themselves, or render special services, even should they belong to the servile class, are rewarded by grants of land in sparsely peopled districts or on the borders. There the new chief is at once afforded an opportunity of proving his capacity by attracting people, by founding a village, cultivating the land, and conquering and pacifying the frontier districts.

The laws of succession in Monbuttu have, however, been completely upset by the interference of the Danagla, by whom so-called "Dragomans" were raised to be chiefs in place of the legitimate rulers, and put in possession. Thus, the larger part of Munza's old district is to-day in the hands of Gambari, the son of a smith, who, again, appointed his brothers to be sub-chiefs, although the legitimate rulers, Munza's sons and nephews, are still alive. Quite recently the official entrusted with the government of Monbuttu has not hesitated to appoint Wando's son, Mbittima, to the post of the exiled Mambanga, as chief of the Mabisanga, although this Mbittima is a Zandē, and not a Monbuttu. It is easy to conceive that such arbitrary proceedings have produced great confusion in connexion with the territorial titles, and that pretexts for disputes are constantly cropping up. I therefore at once set to work to find out all I could as to the legitimacy of the present rulers, and as the

A-Zandē as well as the Monbuttu make a great point of direct descent (on the father's side, of course), it was pretty easy to get to the bottom of the matter.

The great Monbuttu chiefs are as follows:—Yangara, Degberra's son; Gambari, a usurper; Kadabó, ditto; Sanga, surnamed "the little" by the Arabs, who is one of Munza's nephews, and Sanga, "the great," one of Munza's brothers. Besides these there is quite a number of smaller chiefs.

As already indicated, both Gambari and Kadabó are not entitled to their present positions, especially as the legitimate heirs are living. In Kadabó's case, however, this legitimate heir is not a very able man, and as his territory is occupied by Momvú and not by Monbuttu, he might with propriety be allowed to hold his place during good conduct. With Gambari it is quite different; for, prudent yet perfidious, he has learnt all the tricks and underhand practices of the Danagla, and whilst obsequious and ingenuous in appearance, the meshes of his intrigues have been drawn over the whole of the country. That he is not thought much of in the upper circles of Monbuttu society is proved by the fact that even at the present day, after having been many years in possession, he dare not sit down in the presence of Yangara or Sanga without their inviting him to do so. Naturally he tries to revenge himself for his false position by all sorts of wicked tricks, and it is quite possible that the time is not so very far distant when, for the sake of the general peace, his removal will become necessary.

Of the two Sangas, the one is the son of Muapa, Munza's eldest brother, the other is Munza's younger brother, both of them, therefore, legitimate chiefs belonging to the family of Erú; while Yangara, whose numerous brothers (Kupa, Benda, Bondu, &c.) have been removed, descends through his father from the family of Ndula, and may also be considered as of pure blood. This ancestor, Ndula, had remained on the other side of the Ḳibali, but had given his daughter, Degberra's sister, and a renowned beauty, to Nabimbali, the son of Manziggi, and brother of Túkuba (Munza's father), thereby founding the relationship between the two principal lines.

The rulers of the country do not levy regular taxes, but the

chiefs are expected to appear before them from time to time, when they bring with them presents of girls, cattle, eggs, bark cloth, &c. During the time of their residence at the court, the sovereign is bound to find them in food, which accounts for the great crowd of servants, and especially wives, belonging to each chief, for upon them devolves the cultivation of the fields.

Three meals daily are taken in Monbuttu, the hut of each wife furnishing the chief with one dish, contained in a wooden bowl, and floating in palm-oil, the chief himself distributing the food with his own hands. A chief may not eat in public, but takes his meals in the hut of his favourite wife, who waits upon him, and all that is left after he is satisfied, and has given some to his wife, is buried. As there are hardly any cattle in the country, the meals consist chiefly of vegetables, which nature supplies in great variety. The *menu* includes roots of all kinds—yams, manioc, of which only the sweet variety grows here (the poisonous kind is common in the A-Zandē country), Helmia, sweet potatoes, sesame, a little eleusine (no durrah, and still less Penicillaria, for which, indeed, there is no word), gourds of various kinds, Colocasias, and a great variety of fruits, but the staple food is always and everywhere the banana, both fresh and dried. If we add to the above game of various kinds, including even monkeys' flesh (but not the flesh of lions, elephants, or snakes), as also fowls and eggs, all kinds of birds, and, as tit-bits, the fat larvæ of insects, the *cuisine* cannot be said to be badly supplied, especially as human flesh has to be added to the bill of fare.

It is a lamentable fact that the practice of cannibalism, though concealed in the neighbourhood of the stations, is at the present day just as widespread as when the Arabs invaded the country, and that hardly any one is buried, and corpses are bartered as before. Men who abstain from human flesh are the exception, just as with the A-Zandē, and chiefs like Wando and Yangara owe part of their reputation among their countrymen to this circumstance. Neither do the Akka despise human flesh; of this I have repeatedly had proof.

Tobacco, beer, and cola-nuts are the only narcotics or intoxicants with which I became acquainted. The tobacco (*tobba*,

Nicotiana virginiana) is not grown on a large scale, but its consumption is general, and even little children are smokers. The enormous *chibuk* is made out of the middle rib of a banana-leaf, with a mouthpiece made of a twisted leaf stuck into the broad end of it. Usually only two pulls are taken, although the tobacco is very good and sweet; but it is taken for granted that the servant who carries away this huge pipe should also take a pull. Hookahs made out of gourds are occasionally used. Chewing tobacco has been introduced by the Danagla, but the custom has never really taken root.

The people, however, chew the cola-nut, a flat fruit of a beautiful pink colour, enveloped by a white covering. The cola-nut tree is often found in the broad "gallery" woods of the country, and is a tall and stately plant; the fruit resembles a short thick banana, with a greenish-yellow shell, split lengthways, and containing two rows of large flat seeds in a strong white covering. When these have been removed, pieces of the pinky pulp are cut off and eaten, generally while smoking. The taste is rather bitter, and produces a slight flow of saliva. Some extol the fruit as a cure for congestion, giddiness, and dysentery, others say that it is a good aphrodisiac. I have not succeeded in proving its specific action.

The taste for beer is universal. It is usually prepared from bananas, almost in the same way as in Ugánda, more rarely from eleusine. A drink like wine, rather pleasant and effervescing, is obtained by macerating dry bananas in water, and allowing them to ferment slightly. It usually causes a slight attack of diarrhœa in strangers, just as eating dry bananas causes colic. On this account, the Monbuttu recommend that the dried bananas be dipped in palm-oil before eating them. Occasionally one is offered palm-wine obtained from the Raphia and oil-palms. It is obtained by cutting out the pedicel, and then collecting the sap in a jar, which is covered with a lid to protect its contents from the rain. This operation, of course, would ultimately destroy the tree, and must not, therefore, be repeated too frequently. The oil-palm is of great value, for fatty substances are very rare in the country, whilst the demand is very brisk. Fat is here obtained from termites, *mberekai* (a kind of gourd), sesame, Hyptis, the oil-palm and

the *mbili*-tree. The Lophira is very scarce in Monbuttu, but abounds in the A-Zandē country. It is hardly necessary to state that human fat is used by preference where it can be obtained.

In contrast to other tribes, where the upper, and especially the ruling classes, hold themselves strictly aloof from the serving class, a certain amount of free intercourse is allowed here. Although, as a rule, marriages take place between girls of the better classes and their equals, yet it is common enough to see even girls belonging to the ruling families, especially if they are not beautiful, married to men of the people. Marriages are always arranged by means of a go-between, who receives the price given for the bride, part of which is delivered to the bride's father, the remainder being reserved for her nearest relations, and part kept back as commission. These presents consist of slaves, cattle, and especially iron. If a ruler gives his daughter in marriage, it is the custom to give with her four maidens, in order that she may not go alone, and that during the first months of married life she may have good servants. When women of the better classes leave their huts, they are always accompanied by one male servant and several maids. Although the relations which exist between servants and masters are very cordial, obedience is strictly enforced, and no servant is permitted to address a superior except in a stooping position, with the hands placed upon the knees.

It is not considered improper for a grown-up girl, though a prince's daughter, to visit her lover at nights, even should he be a servant. Should lovers wish to marry, the girl's father is informed of the fact, and he makes a feeble attempt to obtain payment for the bride. If the young man is rich, the price settled upon is immediately paid; if he is poor, the claim is not pressed. As a rule, the women appear to have considerable freedom in their amatory proceedings, but open prostitution is rarely seen. It is possible, however, that in the interior of the country, at a distance from the stations, other customs may be in vogue. The marriage festivities, at which presents have to be made to all who attend, often last for twenty days. Polygamy is practised throughout the country on a large scale, for wives are cheap, and may be obtained even for

nothing, and a poor man desirous of entering the wedded state need only apply to his chief in order to have his desire gratified, without being called upon to make payment for his bride.

Monbuttu women are celebrated for their fecundity, and children are looked upon as a blessing. It is a remarkable fact that far more female children are born than males. Sterility is a disgrace, and sometimes results in the wife being returned to her father. Usually, however, the husband prefers to add to his wives, in the hope of obtaining children. The Monbuttu profess to be in possession of roots which cure both impotence and sterility. Cases of flagrant adultery are brought under the notice of the chief, who confiscates the property of the adulterer, and gives two-thirds of it to the woman's father and one-third to the injured man. The reason for this unequal division is, that the father of the adultress has to provide the injured husband with another wife, usually a sister of the guilty woman, who generally remains in her father's house.

Women in labour lie upon the side; cases of difficult labour or retention of the placenta are treated by the application of counter-irritating plants to the abdomen. The birth of twins is considered to be very fortunate, and is celebrated by a great feast, to which all neighbours bring presents. The placenta is placed in a jar and carried in a great procession to be buried in the middle of a road; after this is accomplished it is customary for every one when leaving the spot to pluck two leaves, and after spitting upon them, to throw one to the right hand and the other to the left. Twins are distinguished by special names; if they are males, they are called *aburi* and *nabese*, if females, *abuda* and *tindade*, the first name being given to the first-born, and the second to the last-born.

When a man dies, the whole of his property goes to the eldest son, who adds to his harem all his father's wives who have children—except his own mother—but divides the childless wives among his brothers, with such portions from the paternal property as he may think fit. At the few burials which take place, very few ceremonies appear to be practised, for body-snatching is the rule. The Majó, a tribe in the Monbuttu country, appear to occupy quite an exceptional position in this respect, for they are said to burn their dead

and scatter the ashes. All these statements must be received with the greatest reserve, for my informants spoke about burying with hesitation, and I myself never saw a grave. The signs of mourning are shaving off the hair, neglect of care for the skin, and retirement from society. A stated time of mourning is not observed.

One beautiful feature in the character of this people is the sympathy felt by the women for each other at the loss of their children. Altogether the wives enjoy a much higher social position here than among other Negro tribes; they have to take care of their children and attend to the cooking, but most of the hard work, such as tilling the fields and manufacturing pottery and mats, is done by female servants, and in her own house as well as abroad the wife is treated with the greatest respect. No husband would undertake anything of importance without first consulting his wife, and cases have often happened in which the influence of a wife has brought to nought the counsel of the elders.

The clothing of the men consists everywhere of bark cloth from the bark of a Urostigma, which is called here *noggi*, but is known to the A-Zandē as *rokko*, a name which is now used all over the country. The bark cloth is originally of a buff-colour, but it is generally dyed with red wood or humus. It cannot compare with similar materials from Ugánda either in fineness of texture or in flexibility. This may partly be accounted for by the mode of preparation, partly also by the fact that the bark is allowed to get old and tough before being worked up. This process consists of splitting, cleansing of the outer side, stretching and beating with pieces of ivory, exposure in the air and sun to extract the water, and browning. The stretching is effected by beating and by pulling. Furrowing the cloth with fluted mallets is not known anywhere, nor are fancy cloths met with.

While the men wear trousers of bark cloth reaching to the breast, or at all events short drawers or two aprons, none of them, however, being perfectly unclothed, the women's dress is confined to an extremely doubtful covering in front. In the presence of strangers, women, as long as they sit upon a stool, place the belt in which they carry their children across

the lap, but as by rising they would find themselves in an awkward predicament, they turn deftly to the right-about, whilst still retaining their seat, hold their stool, rise while pressing the light stool to their seats *a posteriori*, and in this position move away two steps, when a distance required by an observance of decencies is supposed to have been reached.

If little attention is paid to the clothing, all the more care is expended upon the dressing of the hair, and as Nature has lent her aid by bestowing upon the people abundant heads of hair, a good deal can be accomplished in this direction. Apart from the high chignons, one notices, especially in girls, numerous fantastical frisures, produced by puffing and plaiting the hair; they for the most part defy all description. If a person's own hair is not considered sufficient, that of some dead person is requisitioned. Head-dresses and brimless straw hats are kept in place by means of ivory hair-pins, which are also used as ornaments. They are neatly made, with square, round, or crescent-shaped heads, which are sometimes decorated by burnt-in dotted patterns. Iron hair-pins, as used by the Zandē, are very rare here, and probably of foreign importation. As trimming for the hats, round bunches of red parrot's feathers are used, in default of which (for they are dear) the white feathers of hens and cocks are utilised. Chains and bracelets of iron, copper, and brass are worn. It is a universal custom to paint the body with the black juice of the gardenia, and to lubricate it with a pomade made of a red wood and palm-oil.

When the day's work is over, dancing and singing are carried on. On important festive occasions the chief or his eldest son dances before a semicircle of women, who sit upon stools and accompany the fantastic movements of the dancer with singing, swinging the arms, and swaying the body. The costume of the dancer consists of the red *rokko* trousers, and a belt ornamented with copper, bunches of genet, monkey and leopards' tails, pieces of beautiful otter-skin, and bunches of various-coloured feathers, especially those of the parrot and turacos. The women's dances are specially arranged. Forming a large circle, they step lightly around, singing as they go, and surrounded by a double row of men. The mimicry of the dance is more decent here than elsewhere. Trombones

of elephants' tusks, drums and kettledrums (the drumsticks covered with caoutchouc), and noisy wicker rattles containing the shells of a fruit serve as musical instruments. The dancers wear girdles and necklaces made of large glittering pods, which produce a good deal of noise.

Having mentioned the ornaments, the mutilations must not be forgotten. It is well known that all Monbuttu, both men and women, cut out a piece of the concha, and are on this account called "Garagir" by the Arabs; but it is not so generally known that this custom was first adopted by them, when they occupied this country, in order to assimilate themselves to its aboriginal inhabitants. Another custom much in vogue is filing the upper middle incisor teeth, so as to present a small triangular space; the total removal of teeth, however, is never practised. The Monbuttu brought with them from their original home the custom of circumcision, and regard it as a sign of their superiority over other Negro tribes. The rite is performed by men set apart for the purpose, and with special iron knives, when the boys reach their fifth or sixth year. The bleeding is stopped by the application of vegetable ashes, and by dressing the wound with the leaves of an Aroid; in five or six days the part is quite healed. Poor people do not make much fuss over this rite, and content themselves with offering to their neighbours a jar of beer; but people of position celebrate the event by parties and feasts, often lasting a week or a fortnight. The most curious custom, however, and one which is particularly observed in the ruling families, is bandaging the heads of infants. By means of these bandages a lengthening of the head along its horizontal axis is produced; and whereas the ordinary Monbuttu people have rather round heads, the form of the head in the better classes shows an extraordinary increase in length, which certainly very well suits their style of hair and of hat.

The household utensils, made of wood or clay, are excellent of their kind. Favoured by a rich and remarkable variety of material in wood, canes, and palm-twigs, the Monbuttu have excelled for ages in woodwork; the elegant benches and benchlets for men, the stools for women, ornamented in fanciful patterns, the dishes and bowls for food, and, more recently, the

boxes made from one piece of wood, in imitation of the trunks in which the Arabs carry their clothes, prove this abundantly. The legs of *ankarebs*, made of blackened wood, and carved by the Monbuttu with a knife, hold their own when compared with the work of the lathe. It is true, however, that real artists, who carve heads and figures, &c., are more numerous amongst the A-Zandē. The pottery, although made out of very coarse clay, surprises one by the varieties in design, the pure taste exhibited in the decorations, which are often in relief, as also by the presence of handles or depressions for the fingers. As a rule, the pottery is unglazed, and the original clay is not coloured, nor is it even freed from its mica scales. In all their workmanship the Monbuttu exhibit much good taste, and, as willing and clever workmen, they thoroughly appreciate good work. How far their love for symmetry leads them is shown by the fact that the wood, which is cut during the dry season and piled up in the huts for use in the wet season, is regularly dressed, and has its smooth sides decorated in various colours.

IV.

IN THE COUNTRY OF THE BARI AND LATÚKA.

I. From Gondokóro through Tárangole to Agaru.

SCENERY TO THE EAST OF GONDOKORO—THE LIRIA PASS—CONFUSION IN THE NOMENCLATURE OF MOUNTAINS—DISTRICTS OF THE LOKOYA MOUNTAINS—THE KOLLOMELLO CAVE—BURNING SANDS—PANORAMA OF TWENTY MOUNTAIN GROUPS—INDEPENDENCE OF THE LIRIA DISTRICT—VIEWS TO THE EAST OF LIRIA—STATION OKKELA—REGIME OF THE GINETTI—ABUNDANCE OF GAME—POVERTY OF SALT AND SICKLINESS OF CATTLE—LIONS AND LEOPARDS—A LION-CHARMER—FRUIT OF THE DOLÉB PALM—THE OLD VILLAGE OF OKKELA; A FÊTE CHAMPÊTRE—LATÚKA DRESS, WEAPONS, AND SPORT—PREPONDERANCE OF WOMEN—LATÚKA HUTS—OSTRICHES—THE AVIFAUNA OF OKKELA—THE BĒR COUNTRY—STRENGTH OF LATÚKA WOMEN—FUNERAL RITES—BONES IN URNS—LATÚKA TOBACCO—THE STATION LÓRONIO—THE MOUNTAIN CHAIN OF LAFIT—FORTIFICATIONS IN LATOME'S VILLAGE—TARANGOLE—PHYSIQUE OF THE LATÚKA—TRIBAL MARKS—THE IRENGA DISTRICT—THE LATÚKA LANGUAGE.

The scenery around Gondokóro, in spite of the time of year (March 29, 1881), presented a varied aspect, being characterised by numerous mountains and many small groups of Bari huts surrounded by high euphorbia hedges. The little station itself, after having been abandoned by Gordon Pasha, was reoccupied three years ago by ten soldiers, principally for the sake of its lemon-trees. It was then enlarged to form a sort of outpost to Ladó, and is now the means of communication with the surrounding Bari chiefs, repaying cultivation on account of the richness of its soil, and forming an important base for our communications with Latúka. How greatly times have altered here may be shown by the fact that

now the post is garrisoned by twenty soldiers, and that the chief, Loron, Baker's antagonist, has become one of our most trusted adherents.

A large sandy plain, with doléb bushes and briars, intersected by several small *khors*, extends from Gondokóro to the imposing mountains of Belinian (Belingong), which flank the road to Chief Befo's village, Urbare. Numerous Calotropis grow here, as they always do in this kind of soil. Forest trees, magnificent tamarinds, butter-trees, and acacias, just beginning to shoot forth their fragrant blossoms, grow in greater number near the mountains, where the land also is greener, owing to the damp soil. Beautiful green meadows, on which large herds of cattle graze, attended by flocks of snowy-white herons (*Bubulcus ibis*), gradually encroach on the yellowish-red tracts of sand. Numerous small *zeríbas*, enclosed by strong thorn-hedges, and industrious people preparing the land for seed, and followed by dogs with bells round their necks, lent to the village of Urbare a cheerful, homely aspect. About five minutes north-east from this place we came across the bed of the large Khor Kadwe, known farther down as Khor Kirínion (the Bari have a nasal "n" exactly like the French), which is the principal channel of drainage for this part of the country. There is plenty of good water in certain parts of its bed, which is deeply excavated, and is bordered on either side by broad banks of coarse sand, with numerous fragments of quartz and still more numerous mica scales. Hundreds of storks were assembled in the adjoining fields, but would allow no one to approach them; the tufted *Scopus umbretta*, not nearly so shy, stood nodding and fishing in the shallows.

Chief Befo, after "scaring away the rain," became our guide through his country, which extends nominally from the Belinian chain to Tollogo. Hills of hard yellow ferruginous clay, bestrewn with quantities of quartz rubble and overgrown with thin brushwood, marked the first slight ascent to the Lokoya group, our next destination. On our march we crossed Khor Kadwe and Khor Kasuba, the former a broad stream but quite dry, the latter gay with vegetation, and containing water which smells badly and tastes slightly of iron. Large blocks of

granite, striped red and black, lay on the banks, where we found solitary Adenias, with their underground stems and purple blossoms. Jebel Torkola, which we soon reached, was partly covered by bamboos, and on its summit glittered and sparkled large plates of mica, which is found throughout this district. The mountain itself consists of grey granite. Jebel Longóbo, which we reached after crossing Khor Gollo-lindu (known farther down as Mirshuk), is usually named Jebel Bonjurem, after the Bari tribe living there. Unfortunately, not a drop of water was to be had, and a storm coming on suddenly, converted the yellow loam into a stiff mud without providing drinking-water. The nearest village lay far away on the mountain, and its inhabitants did not show themselves, although Befo, their chief, was with us; so when the rain abated a little we had to leave our refuge—a magnificent tamarind—and, wet and still thirsty, we continued our journey. Rounding the last spur of Jebel Longóbo, which rises in the shape of a beautiful pillar, called Lili, we passed through fine park land to Jebel Mólere, a rather long range, on the slopes of which lies the village Ulikare, where we encamped under a mighty butter-tree.

The population of this district is very large, judging from the number of villages in sight; the ground is well cultivated. It consists of coffee-coloured vegetable mould, overlying, to a depth of three feet, a stratum of granitic rubble; here, too, water is scarce. Wells have been dug in the deepest part of a fold of the ground, which comes down from Jebel Mólere. These wells are about ten minutes' walk to the east-south-east of the village. They are about six feet deep, and fill by percolation; their water is not clear, and is not exactly improved by the habit the people have of washing themselves in it before they fill their vessels.

Here Chief Befo took leave of us, after furnishing us with porters; he did not venture to proceed farther, on account of a blood-feud which exists between him and Rugang, the great rainmaker and chief of the Liria district; he would probably have been made away with long before this if he had not prudently joined us. A great deal of rain must have fallen here, for the forest—still the open Bari forest—is beautifully

green, and in the short grass just shooting up, quantities of various Liliaceæ are in blossom, among which a fine white Crinum attracts attention by its sweet scent. A multitude of small *khors* intersect the hilly country, and granite and mica crop out on the surface. A sort of open defile is formed by a continuous line of isolated hills on one side, and the range of Jebel Kajumbo on the other. We passed through this over a very good road, and in the midst of a lovely wood of lofty trees, until a sudden turn led us into a narrow valley lying between Jebel Kajumbo and Jebel Tollogo; this was the dreaded Liria pass of Tollogo. We halted under a sycamore, but before we could sit down to rest, the men provided by Befo in the morning ran away, leaving us with only our few Latúka porters. Large numbers of houses were visible on Jebel Tollogo, all standing on small terraces levelled for the purpose, many of them high up on the mountain-side, and hedged round with strong fences of thorns and bamboos. The foot of the mountain and the valley were very diligently cultivated. Large numbers of men were industriously grubbing up the soil with long shovels and preparing it for seed, while the women and girls were collecting the uprooted grass into heaps, to be subsequently burnt in order to extract salt from the ashes. An attempt to procure porters here for the short distance to Rugang's village was of no avail, for no one would leave his work. We had, therefore, to distribute some of the loads of flour, &c., among the remaining porters, and then we commenced the passage of the narrow defile, for in some parts it well deserved this name.

The valley is at most half a mile wide, and rises but slightly; the small Khor Modira, which flows through it, receives from all sides the tribute of numerous rain-drains. The mountains are in some parts richly wooded, but elsewhere they are quite bare, and exhibit the grey granite with white and red stripes of which they are composed. Numerous villages are situated on them, so completely matching in colour the dark rocks and woods that they are only discovered with difficulty. Their strong *zeríbas* indicate great caution, which is no doubt necessitated by the continual feuds and raids among the small independent Bari tribes. I purposely use the word "Bari,"

because, although many of the inhabitants of Tollogo understand Latúka, their language, the formation of their skulls, their manners, customs, and arms, show that they really are Bari. The foot of the mountains has been converted into terraces, which are protected by stone walls from the destructive action of water, and are most carefully cultivated, as is also the bottom of the valley. A narrow path, lined on either side by the stems of the ragged *Boswellia papyrifera*, leads through the fields in the direction of Jebel Lohe, which appears to shut in the valley entirely. In the upper part of the valley the path is much obstructed by rocks which have rolled down the hillsides, and the vegetation being more vigorous, it would not be so easy to meet the attack of an invading force. Fortunately, the people just now have something else to do, and this pass is reputed perfectly safe. A sharp turn to the left, clearly marked on Heuglin's old map, brought us out of the Tollogo valley, and then led us along the foot of Jebel Tollogo (here known as Liria) and over rocky declivities, strewn with enormous boulders and intersected by deep ravines.

The geographical nomenclature in this part of the country is so confused that it may be as well to explain the true state of things, for the benefit of future travellers. The whole range of mountains, including Jebel Kajumbo, Jebel Mólere, Jebel Tollogo, Jebel Oppone, Jebel Lohe, &c., are designated by the natives under the general name of the Lokoya mountains. Where this name originated is not clear to me; perhaps it was introduced by the Danagla, who call Jebel Remo in the Madi district Madi-Lokoya, and the name also figures on Speke's map. What *koya* may mean in the language of Dar Mahas, or some other Nubian "Dar," I cannot say: here this word, in the language of the Danagla, signifies *razzia* or "raid." There is no doubt that words first introduced by the Danagla have been incorporated in the Negro languages, and are now current throughout the country. As instances I may mention *meryem* (woman, female), *nyerkúk* (child, young), and *vagián* (proud, obstinate), which must be familiar to any one who has travelled through the regions of the White Nile or the Bahr-el-Ghazal.

But to return to the mountains. The country occupied by the

Lokoya mountains is divided into districts inhabited by various Bari tribes. One of these, which includes the Tollogo valley and the whole of the eastern slope of the mountains as far as Bēr, is called Liria. As Rugong, the present chief of Liria, a son of Leggi, who was chief in Baker's time, has managed to acquire considerable influence as a rainmaker and a robber, the name of his district has gradually been extended beyond the boundaries of the district to which it was originally applied, but the Bari still confine this name to Jebel Tollogo and its spurs.

The guides drew our attention to a large cave, Kolomello, situated in the midst of a confused jumble of rocks and boulders, which must often have afforded protection from the sun and bad weather to herds and herdsmen. The burning rays of the sun, reflected by the bare rocks, poured upon us like a shower of fire; heat radiated from the burning sandy ground as from an oven; there was not a drop of water far or wide, only a multitude of singing grasshoppers, whose sharp metallic chirp fell more clearly on the ear owing to the oppressive silence. We were really delighted when the nearest buildings of Rinyak, the capital of the Liria district, appeared high up upon the mountain, and the cheerful clanging of hammers announced the approach to a smithy, which, according to Bari custom, always stands outside the village. A large plain at the foot of the mountain sinks gently towards the south, and we halted under great butter-trees and fig-trees, to see the chief of the country. He soon appeared, attended by about 200 men, and after receiving some presents, kindly promised to complete the number of our porters, asking, however, for a delay until the next morning. I took the opportunity of surveying the country from the slope of Jebel Oppone, usually known as Jebel Liria. A splendid panorama spread out before me, for about twenty different mountain groups were in view, extending from the solitary Jebel Loligono in the Bēr (Berri) country, in the north, down past the Lafit range, to the superb Jebel Molong and the two-horned Jebel Ekara, in the Obbo country. I noticed here that the names given by the Latúka often differed entirely from those employed by the people of Liria.

The whole of Liria, although it joined us last year, and can now be crossed almost without an escort, is still virtually independent. Its inhabitants, a fine powerful race of the Bari type, and entirely like them in manners and customs, have a bad and widespread reputation as robbers. They used to extend their raids northwards as far as Bēr, and southwards into the district of Kíri, and it was not till the chiefs of the last-named district had received arms from me that they succeeded in keeping them at bay. Rugang enjoys a great reputation as a rainmaker, a somewhat dangerous calling; his father was killed by his subjects because rain did not appear. While durrah is grown largely in this district, tobacco, curiously enough, is seldom cultivated, and thrives badly. The people procure their tobacco chiefly from Latúka, which yields a large and superior quality. It is a good hunting region, for the extensive open woods harbour large herds of antelopes, and elephants are also plentiful. The fact that the dwelling-houses are generally without fences proves that beasts of prey are not very numerous or are not dreaded; however, compounds for the cattle are, as usual, enclosed with thorn-fences.

The night was over at last, in spite of the rain, the wind, and the swarms of mosquitoes, and the Latúka were ready to start; Chief Rugang had put in an appearance with spear, bow and arrows, ready to act as our guide, only the promised porters had not arrived. On my reproaching him for not keeping his promise, the chief went off in a great hurry to fetch them, and after a few minutes returned, accompanied by three women; the men, he said, were engaged in field-work, so the women should do the carrying. This proposal was, to their great satisfaction, refused, the baggage was redistributed, and after some delay we at last marched off, Rugang insisting on accompanying us. He is living at strife with his people, as he confided to me on the way, because they wanted rain, and he did not give it them.

The country in front slopes gently down to the Khor Rodon, for the mountains of Lokoya, which penetrate like a wedge into the plain that stretches from here to Gondokóro, now lie behind us, and the general rise of the ground is but slight. The sandy soil supports the same vegetation as to the west of the

mountains, except that here the acacias (*Acacia campylacantha*) form veritable woods, with thickets of aloes growing between the trees. A Jebel Korola lies some three miles to the left of the road; it is occupied by people from the original Jebel Korola, which lies to the northward. Immediately past Khor Rodon is an extensive plain covered with Cyperaceæ, and clumps of trees here and there; as the sedges indicate, it may be entirely flooded, and hardly passable in the rainy season, but at this time it was dry. Kigelias and euphorbias grow on the elevated spots, while hundreds of elephants march about in troops, not exactly improving the road, which is so trodden down by them that one has the greatest difficulty in steering one's course unharmed between the holes and ditches. This paradise of elephants is named by the Liria people Kadenokoka; the Latúka people call it Kittagong. Swarms of little butterflies literally covering the ground at all the damp places look exceedingly pretty, and resemble white and red blossoms sprung from the black swampy soil. Equally pleasing is the sight of yellow-backed widow-birds (*Penthetria macroura*), that clamber about the high grass in noisy companies. It takes about an hour to march through this swamp; at its extremity Khor Kafali runs northwards to the Bēr district, where it joins the Khor Gineti, there called Chol or Chon.

Very open acacia woods, interrupted by many clear patches of meadow land, lie beyond this *khor*. The tracks of numerous visitors are visible upon the edges of the rain-pools, spoors of buffaloes and giraffes being quite unmistakable. In the deep bed of Khor Lodo there were only a few little pools of muddy, bad-smelling water, and large masses of dark, ferruginous, slag-like clay were visible. This *khor* also flows northwards, but before reaching the Bēr country empties itself into the Khor Kafali. On all the trees large bats (*Xanthorpia*) were hanging, which flew wildly about on our approach. A rarer guest, the *Stenostira plumbea* of the western countries, appeared here for the first time. Nearly three hours' journey through open acacia forest, abounding in large game of all sorts, brought us to a pool called Sogodi, which appears to be a rendezvous for hunters, for the ground is strewn all over

with pieces of bones. The large root-stock of a plant, about twenty inches high, growing plentifully here, is dug up by the natives and used to impart a pleasant taste to drinking-water. It has greyish-green stiff leaves, which grow without a pedicel on the squarrose ramifications. The fruit is sweet, and in shape like olives. We found ripe yellow plums of the Spondia.

We then entered fine park land, and soon heard the sound of running water from the Khor Gineti (Baker's Kanieti), which flows northwards in foaming rapids. We had to pass its broad bed, in which were numerous piles of stones and very little water, and then we came to our first station in the Latúka country. It stands at a turn of the *khor*, and is entirely concealed in forest, so that it was not visible until we were close upon it. Okkela, or Wakkala, as the Danagla pronounce it, is occupied by only twenty men, and was erected last year after repeated requests from Chief Chulong, in order to protect him and his people from the attacks of the Bēr, which recur periodically in the rainy season. The Khor Gineti, flowing close by, and having a floodmark on its deep bank of from four to seven feet above its present, and certainly lowest, level, often rises so much in a few hours that the ford is rendered impassable for days. Though containing little water, it flows throughout the whole year, which indicates the existence of springs, probably in the Obbo mountains. Its water is muddy, very likely owing to its loamy sides, and is not good, although some ten minutes above the station, at a bend of the *khor*, there are rapids, where the water roars and foams—a favourite haunt of *Scopus umbretta*. To the north it loses itself in the broad swamps of the Bēr country, enormous stretches of land extending, perhaps, to Bahr-el-Zaraf, and forming a refuge for numerous herds of elephants, which are only disturbed by hunters in the dry season.

The country here is richly wooded, and its stores of game are inexhaustible. Elephants, giraffes, buffaloes and zebras, wild boars, and thousands of antelopes, from the bulky *Antilope oreas* to the graceful *A. Hemprichiana*, disport themselves in the verdant clearings and open forest. No less than seventeen pitfalls have been made round the station, and prove very dangerous to the traveller.

Although the abundance of game is a blessing to the people, I attribute to it a fact which I could not previously explain; all cattle brought here, and riding animals, such as donkeys, mules, &c., are ruined after a short stay. Swellings on different parts of the body, loss of appetite, emaciation, and finally death follow one another speedily, a combination of symptoms which I attribute to the intrusion of intestinal worms. This view is confirmed by the fact that all the game absolutely swarms with worms; this is always the case in countries where salt is rare. Another pest, also connected with the game, is the existence of numerous ticks, which much inconvenience a traveller on the march. But more dreaded guests than these are attracted hither by the abundance of game; lions, leopards, cheetahs (*Cynailurus guttatus*), smaller animals of the cat species (*Felis serval* and *F. caligata*), and hyænas are such familiar sights that one soon learns to take no notice of them.

Only the leopards are dreaded, for they often attack men, which the lions never do, although they lurk in the bush in twos and threes. The Negroes tell me that they are under the control of a chief named Lottor, a very simple, good-natured man, who always keeps two tame lions in his house (a fact), and as long as he receives occasional presents of corn and goats, prevents the wild lions from doing any mischief. It is curious to note that the lions here are really good-tempered (perhaps because they find abundance of food), and they are also much admired, as was shown by the following incident:—One day we came upon a lion caught in a pitfall, whereupon Chief Lottor was fetched, and he pushed into the pit branches of trees to enable the lion to get out; this it did, and after giving us a roar of acknowledgment, walked off unharmed.

Another chief is said to possess the power of keeping the game away from the pitfalls. One of our men told me that this chief was at one time detained under arrest at the station for a few hours, the consequence being that no game came near the station for about eight days, so that a present had to be sent to the chief to appease him. Chief Chulong's wife also is famous for her power over the numerous crocodiles which make their home in Khor Gineti.

Fishing is ardently pursued by the women, and is chiefly

carried on by means of large nets, made from fibres of Sanseviera, which is very common over the whole of Latúka; they are spread out over a part of the *khor* by five or six persons, and then drawn to land. Large fish are killed with sticks, but crocodiles are allowed to escape.

About an hour and a half's journey from here to the north-west lies an extensive forest of dolèb palms called Kayala (a general name for all palm forests); it is about four hours' march in length, and, in parts, two hours' march across. Now that corn is scarce, it abundantly supplies all the surrounding villages with orange-coloured fruits, which are carried for miles by women in nets on their heads; the stringy husks are either eaten raw or macerated in water, which is then drunk. The kernels themselves are planted, and dug up again as soon as they begin to sprout, when they are eaten raw or boiled. The large village Lóronio, about five hours' journey distant, also draws its supplies from this forest; but as the elephants, and still more the very numerous baboons, like to have their share, and are often very troublesome, the villagers have combined to send a guard in turns to the forest to protect the women and children.

Close beside the station stands the Negro village Okella, which must certainly have existed for very many years, for the original fence has gradually become such a thick entangled mass of bushes, briers, underwood, and trees, that it is quite impossible to get through it except at the entrances, which are kept free by the inhabitants, and which Baker mentions. This natural fort could hold out for a long time even against an attack with firearms. The wood forming the rampart is in places nearly a mile broad. The village stands on a very large open space within this fortress of wood, and as Chief Chulong was killed in a quarrel, it is governed by his wife, until her son grows up. The huts are built of straw in a peculiar form, and are arranged in groups separated from one another by fences and shockingly dirty narrow paths. At one end of the village an enclosure built round an immense fig-tree is used as a meeting-place by the men. Upon a high scaffolding there are numerous reclining-boards, which command a distant view, and are occupied at all hours of the day by men of all ages, talking,

smoking, and transacting business. Under the trees the boys engage in basketmaking, for which the leaves of the doléb palms furnish excellent material.

The men are usually quite naked, and deck themselves with ornaments made of iron, and sometimes of copper, which is highly prized. Spiral coils of brass, which find their way here from Zanzibar through Ugánda, are much sought after and much valued. Cowries are valueless. Bead ornaments are little cared for, except a dark blue cylindrical sort, called *maujúr* in the Sudān, which are used for waistbands and necklaces, and small coral and blood-red beads, with which they decorate the head-dresses. The latter have the form of an antique helmet; they were mentioned by Baker. They are made of a thick felt of human hair, and are adorned with plates of copper, red beads, cowries, empty brass cartridge-cases, the fruit of the *Abrus precatorius*, &c.; but a tuft composed of the gaudiest feathers procurable, resembling the old plumes of heron's feathers, is considered their chief ornament. For this purpose gay-coloured weaver-birds, &c., are snared, and this practice has often given me a good opportunity of ascertaining the native names of birds. Scars on the forehead, temples, and breast are common tribal marks.

The only weapons I have seen are spears and shields. Knob-sticks are used by the women for killing bustards. The men are excellent hunters and extraordinarily courageous; they attack the elephant and rhinoceros with the spear, and also the buffalo, a still greater feat, for the hunted often hunt the hunter. The solitary old bulls are especially dangerous; they take possession of certain districts, and often render the roads impassable. One of these animals established itself near our station, and after severely injuring ten men in eight days, it was killed, but not till it had received twenty-three bullets! In this district hunting parties are formed throughout the whole year, as there is no close time. The name given to this very village by the Danagla when they first occupied the country, and which is in use at the present time, was *Zeribet-es-Sayadin* (the hunters' village), which shows that sport has long been pursued by the inhabitants.

Women and girls are much more numerous here than men.

This numerical disproportion, which also prevails in other parts of the country, may explain why the women here, who are both ponderous and ugly, are not renowned for their chastity, and why the men, on the other hand, are considered very lenient to their robust helpmates.

I have already said that the interior of the village was dreadfully dirty, in contrast to the Bari villages, which are always kept scrupulously clean within, although their environments are very dirty. Hundreds of rats and mice infest the huts. The latter are built upon round substructures, about four and a half feet high, which are usually calked and overlaid with mud. The huts are surmounted by bell-shaped roofs (sometimes peaked), which project considerably over the substructures. A small doorway is left open, about two and a half feet high, which must, of course, be entered on all fours. The interior is kept fairly clean, but is quite dark. The thatch is generally made of grass; many huts are covered with split leaves of the doléb palm, which are more durable and compact—a very desirable quality for withstanding tropical rain. Sheep and goats are the only domestic animals kept here; the former are long-legged and of a superior breed. Curiously enough, I saw no dogs. Agriculture, as is usual among hunting tribes, is rather neglected, although the soil is excellent, and the soldiers grow durrah, maize, ground-nuts, and splendid water-melons.

I saw six little ostriches the size of turkeys running about loose. They were hatched by the sun at our station from eggs buried in the sand. I was told that these birds are very numerous. Snakes appear to enjoy the sandy soil at Okkela, for a considerable number of different species are found there, chiefly adders, among which are several new kinds. Poisonous snakes sometimes make their way into the huts. One of them, a kind of Echis, is very common, and much dreaded.

Okkela is a paradise for the collector. The belt of wood round the Negro village is full of treasures. I shall never forget the pleasure of half an hour which I spent there. The white dorsal mane and tail-tuft of *Colobus guereza*, gleamed through the dark foliage, small families of them being led by white-bearded old males, which gazed fearlessly at the

stranger. Close by, a dark baboon mother was giving her offspring rough lectures on good manners, which, to judge from the howling, were not much appreciated; tall fox-coloured baboons, white on the under-side, were chasing one another along the tree-tops, and barking and yelping like hoarse dogs. A small mouse-coloured monkey with a black face, and quite unknown to me, skulked away through the thick bush; two varieties of Funambulus ran up and down the long tendrils of the creeping plants, and the graceful *Xerus leucumbrinus* roved about upon the ground. Small cats, ichneumons, rats, and mice had also found a comfortable shelter in the wood, and other creatures quite unknown, to judge from the description, are said to haunt it, especially at night.

The feathered tribe was much more numerous and striking. Gorgeous blue kingfishers (*Halycon senegalensis* and *H. semicærulea*) and beautiful bee-eaters (*Merops Bullockii* and *M. albicollis*) were perched on the dry boughs watching for insects; a large grey cuckoo, probably a new variety, could be heard in the tree-tops, as also the handsome *Cuculus capensis*, whose loud cry the Negroes interpret by the word *lashakong* (my gourd), and a charming little falcon (*Nisus* sp.) joined them with a sharp chirp, which the natives call *lefit*, a happy imitation of its cry. Snow-white terpsiphone and brilliant golden cuckoos (*Chalcites cupreus* and *C. Clasii*) were swinging in the green leafy bowers, and cunning barbets (*Pogonorhynchus Rolleti*, *P. diadematus*, and *P. abyssinicus*) came into sight for a moment, to disappear again directly, like woodpeckers. In the thick copsewood *Bessornis Heuglinii* flew off at my approach with a sudden cry of fear, and *Cichladusa guttata* sang as loudly, but was not quite so shy. An Aëdon warbled its beautiful song among the thickest briers, and was accompanied by the tapping of numerous woodpeckers. I caught *Picus nubicus*, the rarer *P. minutus*, and another kind which I think is new; it closely resembles *P. schoensis*, and is equally handsome.

Animal life abounded also in the open country, covered with shrubs, and on the broad clearings and sandy flats. The ground was strewn with the shells of *Achatina zebra;* small lizards and snakes of various kinds—among them the rare

Typhlops—glided over the sand, and larger snakes hissed frightfully and retreated. A concert of croaking frogs was going on at the edge of the *khor*, and on its sandy islands enormous crocodiles were watching the children bathing close by. Herds of *Antilope leucotis* grazed on the young grass; large wild boars issued from holes in the ground; they are no despicable antagonists, for they can make very good use of their huge tusks. Going farther into the bush, I saw the elegant form of a wild cat stealing off with its long tail in the air, and heard a loud growl from a leopard which disapproved of my presence. Lions were most plentiful.

A herd of zebras grazing on the fresh green grass is a pleasant picture, whether surrounded by their frolicking young or running away at a thundering galop. One does not often meet with *Phatages* (*Manis*) *Temminckii* and *Orycteropus æthiopicus;* a fine example of the latter fell into a pitfall, and was unfortunately eaten up before I could rescue it.

In the meantime, I can report little concerning the vegetation, for we are at the end of the dry season. Blossoms were nowhere to be seen. The predominance of acacias over every other form of tree, which is still more striking farther to the east, begins to attract attention here.

A road formerly much frequented leads from Okkela to Bor; it is passable only in the dry season, and then water is scarce. The route is as follows:—From the doléb forest, Kayala, to the village of Bori, at the foot of the mountain of the same name (also called Loligono); thence through a treeless plain covered with grass to an isolated tamarind; from this point through the same treeless country to a lonely *nabbak*-tree, as the jujube-tree, properly named "*sidr*," is called here. This tree stands on the boundary between the districts of Bari and Latúka, and at the same time marks the end of the swamps. Chief Chorkiri's village, Liëna, is the next halting-place, and the next night is passed at a little Bari village called Bombari, in a large forest of dum palms. Then the Bor territory proper begins, and a halt is made at the village Feriak, from which place it is only a few hours' journey to Bor. During the last three of the eight days' march the road runs near the stream, which is first reached at its eastern branch,

known as Khor Kirshambe. No *khor* except Khor Ginetti is crossed all the way between Okkela and Bor, water being scarce along the whole route.

I could procure but little information about the Bēr country (Baker's Berri). The language, the frisure, the practice of carrying two spears, the spears themselves, and the shields, which I had an opportunity of seeing, are identical with those of the Shúli country, so that Latúka must be considered as an encroachment on it, running into it from the north-east or north-north-east; or it may be more correct to regard Latúka as the remains of a primitive population afterwards inundated by Shúli. The western frontier of the proper Latúka territory is formed by Khor Loddo, for the Liria district, though both languages are spoken in it, belongs to the Bari and not to the Latúka.

The warriors of Okkela are estimated at 120 men: eighty young men, and forty who wear "helmets and ivory bracelets," that is, men quite grown up, besides about twenty grey-headed men, to whom no great respect is shown. I was told that each of the men possessed only five or six wives, for cattle are scarce, and sheep and lance-heads are not so cheap now as formerly. The price of a strong full-grown girl was formerly, and is still, where cows exist, twenty-two head of cattle; here twenty sheep or goats and forty iron lance-heads are considered an equivalent; in Laúda and the southern parts of the country forty *molut* (iron hoes). The women can hardly be called the weaker sex here; they carry burdens that a man would shudder at. This is strikingly the case in water-carrying; the streams are often far away from the villages, so that it takes hours to carry a pitcher of water—a very large one, on account of the distance—to the houses situated on the high hills. Cooking, carrying supplies of meat from the forest, providing the family with fruits of Borassus, procuring grass for housebuilding, manufacturing all kinds of pottery except pipe-bowls, weeding, and harvesting, all devolve upon the women. Meat and porridge constitute the staple food. I saw no vegetables eaten except gourds and common purslane. The Borassus has been already mentioned.

There is a very extraordinary custom among the women here

of wearing around their hips, as their only clothing, a small hand-net used for fishing. One of these sturdy beauties, dressed in a net, with a load upon her head, and the indispensable short tobacco pipe in the corner of her mouth, would doubtless cause a sensation in some parts of the world.

When a man dies, the body is laid upon its right side, and buried outside the village, a skin being usually spread underneath it; after a time—generally about two months—the bones are dug up, cleaned, and put into a clay vessel, which is placed beneath a tree or by the roadside, or frequently behind the house of the deceased. When a chief dies, the ceremony is somewhat more imposing. A grave is dug to the depth of three and a half to four feet, in the largest of his huts, and lined with mud and clay by the women. A hide is placed in it, upon which the body is laid in a half-sitting position; then the grave is roofed in with mats, supported by sticks laid crosswise, "so that the earth may not touch the body," and a layer of earth is spread over the roof. After a time the bones are taken out and placed in a clay vessel, which is hung in a tree. Those who fall in battle or are murdered are not buried thus, but are left lying where they fall. Baker has already mentioned the dances which are performed in honour of the dead, whether the latter have died naturally or by violence. In conformity with a custom observed in the south, *i.e.*, in Unyóro and Ugánda, if the dead appear to their relations in a dream, an offering of flour and the blood of a sheep is brought to the clay vessels, and the spirits are besought to discontinue their visits. Little children are buried outside the hut-doors, to the right, and some durrah is usually planted over their graves—a very poetical idea.

The eldest son inherits all his father's possessions, wives included; he may give a share to his brothers, but is not bound to do so. Quarrels between brothers are consequently very common, and they generally end with the death of the younger ones. It is no uncommon thing for a son to murder his father in order to step into his shoes.

Amulets and charms are everywhere held in the highest esteem, and even my boiling-point thermometer for determining heights was looked upon as "medicine for making rain." In

front of one house I noticed a gourd with seven holes, into which were stuck pieces of straw; the woman who lived there had had several children, but lost them all, and this was a charm to prevent the recurrence of the catastrophe.

The chief of Laúda came to visit us, bringing with him a present of tobacco, which is cultivated in his territory. Like all Latúka tobacco, it is made into flat round cakes, which, when required for use, are powdered. The method of preparation is as follows:—As soon as the leaves have obtained the necessary maturity, they are pounded until the stalks and leaves form one mass; this paste is made into a large heavy bundle, which is wrapped in leaves and exposed to the heat of the sun for a time; the drying process is then completed in the shade. When the bundle is opened, its contents are found to have become mouldy; it is exposed to the sun for a second time, then finely ground, and finally a little water is added to it, and it is formed into a paste, from which the cakes already mentioned are made. Throughout the whole district of the upper White Nile these cakes are called *kaniet*, and are much sought after. The best tobacco in Latúka grows on Jebel Molong.

Our stay here had been almost too long, and as we had still much work before us, and a long way to go, we were obliged to move forward. Keeping the cloud-crowned Jebel Lafit, a long mountain chain, to our left, we had to cross a sandy plain covered by burrows, until we arrived at a wide but still passable swamp. It is impossible for me to say much about the next portion of our route as far as Khor Bicher, because a terrible thunderstorm overtook us, and in a few moments the country was transformed into a lake, through which we hurried forward, wading up to our ankles in water. In the park land through which we passed two groups of very dark rocks were visible; Khor Bicher itself was scarcely fordable, and caused a delay of over an hour, as it was so much swollen by the rain, and its banks are so steep. Shortly after, we had to cross Khor Kōz, which is much more important, and comes from Tárangole. Near it lies the large village of Eyakke, picturesquely situated among hills, and surrounded by green corn-fields, and a forest of Balanites. Eyakke is the first village in Chief Latome's

district. Half an hour's march over the well-made broad road, on red clay, which stuck fast to our feet, brought us to Loronio, a station near the hill of the same name.

Chief Latome's village and hill lie in the centre of a slightly undulating plain, enclosed towards the north and north-east by the Lafit range. In all other directions, distant groups and ranges of hills were visible. The soil must be uncommonly fruitful, as it is capable of maintaining a considerable number of Negroes. I estimated that the men capable of bearing arms in Loronio were about a thousand; this may be accepted with slight modification, as the number of huts, which literally cover the hill, is quite astounding. Latome claims authority over thirteen other villages, many of which are larger than this. I say "claims," because he does not, properly speaking, belong to the great hereditary chiefs of the land (at least so Chief Maye told me), but owes his great influence to his skill making rain, and in a measure also to his good government. In each of these villages Latome has huts and wives, whom it is the duty of their respective chiefs to support. He only visits the villages himself to collect tribute, which consists of corn, sesame, honey, leopard-skins, cattle, and ivory. If rain is needed in a village, a deputation must go to Loronio, and Latome, carried on a little *ankareb*, and accompanied by sundry porters carrying pots of *mrissa* (beer), repairs to the place and orders the rain.

The long high chain of the Lafit mountains, which name I may give to the whole range, to save confusion, is at most three hours' march from here; it culminates in the two high peaks Lafit and Ittatók. The range has in different parts many different names; it runs in the direction of south-south-east to north-north-west. Towards Tárangole, which is situated, not in an easterly, but almost south-easterly direction from here, it forms, with other mountains, a sort of defile, from which rise here and there single peaks and hills, many of them crowned with perfectly flat plateaux, on which are situated large densely inhabited villages.

Khor Kōz, the very type of a rain-torrent, flows across the plain from south-east to north-west. At this time it had already partially flooded the land, but in the dry season it does not contain a drop of water. Deep wells have therefore to be

dug in its bed. This would be a fine place to cultivate rice! But now the crowned cranes, swans, knob-billed geese, and storks are undisturbed lords of the flooded land, which with so little trouble might yield a thousandfold profit. Game also abounds here, but buffaloes and lions are less common. Hyænas, dangerous only to goats and sheep, are numerous. The population was busy at this time tilling the fields with crescent-shaped pieces of iron fixed to strong bamboo handles, often ten feet long. A visit to Latome gave us an opportunity of seeing his village. By constructing small stone walls round the hill, a row of small terraces, one above another, had been made, on which separate *zerîbas* and huts were built close together, each of them surrounded by a bamboo fence backed by wood, and made so strong that a musket-ball could scarcely penetrate them. Loronio is one of the strongest positions in the country, indeed almost impregnable, on account of its situation upon the mountain, its thickly packed *zerîbas*, separated only by steep narrow lanes, its rows of palisades and bamboo walls, and the fact that its inhabitants are always prepared for war. A number of watch-towers, often three storeys high, afford the watchmen an uninterrupted view over the country.

Latome received me in a *zerîba* near the summit of the hill, and close by the cattle-yard. The *zerîba* is composed of about ten very cleanly kept huts, with roofs made of palm-leaves, and about double the number of granaries. Latome is an elderly gentleman of medium height and rather pleasant features. He bears the Latúka marks, formed by six scars in two sets of three each, upon his temples. He is a very clever talker, and is known and feared as cunning and untrustworthy. That occasionally his words are followed by deeds is proved by the fact that not many years ago he destroyed 103 Danagla, notwithstanding their superior arms. He has always shown himself very friendly and liberal towards me, although generally accused of avarice. On this occasion we received presents of honey, ivory, and cattle, return gifts having, of course, to be made.

Meantime a motley crowd assembled in the yard—women and girls, the former with leather aprons, the latter entirely

nude; men of different districts, all armed with shields and spears—the genuine Latúka people, recognisable by their slight figures and long faces; those from more southern districts by short stout bodies and round faces—all nude and adorned with iron ornaments, ivory rings on the upper arm, broad copper rings as necklaces, and helmets of shining brass or copper plates, surmounted by waving ostrich-plumes. Some of them wore a cap made of basketwork. After our reception was over, we visited the summit of the hill, whence a splendid view is obtained, extending from Mount Loligono, in the Bēr country, northwards over the whole Lokoya range, to the west, and to the high peaks of the Obbo mountains, in the south and south-west, where the horns of Jebel Asal tower up—so named on Baker's map, but called by the Bari "Ekara," and by the Latúka "Chufal;" then away to the long lofty ranges of Molong and Kilio, the defile leading to Tárangole, with its hills rising up like sentinels, and finally the long range of Lafit, which closes the scene on the north-east—a typical Alpine landscape!

About an hour and a half's march from Loronio brought us to Ongolet, or Longolet, one of the above-mentioned hills, some 400 to 450 feet high, the summit of which was occupied by a strongly fortified village. Round about were well-tilled fields with vegetable mould of a chocolate-colour, and corn-fields just becoming green, and gradually losing themselves in thin woods of Balanites and acacias. Chief Latome accompanied me thus far, and then sent me as a farewell present an elephant's tusk weighing about eighty *rotl*. On all sides little torrents rushed down to Khor Kōz, which we always kept to our right, now flowing nearer to, now farther from, the road, and invariably marked by a thick green belt of trees. The soil here is of a stiff yellow loam, which, softened by water, gives to the latter its yellow tint.

The village of Loriajo, situated an hour and a half from Longolet, is one of the few Latúka villages lying on the plain, and is only defended by a thorn-hedge. Like others, it is divided into different quarters, each having a chief and a watchtower. In this case they number seven. As the village is small and most of the inhabitants were out working in the fields,

we had to arrange for the transport of our goods to the neighbouring village of Bángajok, by the porters making several journeys, which naturally caused considerable loss of time. We had also to remain a night at Bángajok, as immediately beyond Loriajo there are some very deep swamps, in which one sinks to the knees, and many torrents, swollen to the level of the banks, render the passage difficult. As the population of this village, which formerly, judging by the number of huts, must have been over a thousand, had deserted it, we had to send to Tárangole to requisition porters. We found in the deserted huts rough figures of clay, representing oxen and sheep—perhaps children's playthings, or maybe talismans, as they were numerous in the huts built for cattle and sheep. The somewhat elevated position of Bángajok, on the ridge of a slight undulation in the middle of the valley, permitted me to make a small triangulation; even the Lokoya Mountains were visible.

Late in the evening the porters we so much needed arrived, under the leadership of Chief Maye's son, Lajuri, and established themselves in the deserted huts, which now, on account of the numerous fires, had quite an inhabited appearance. Unfortunately, mosquitos were very numerous. Proceeding on our journey, we passed at first through very thick acacia woods growing on yellow sandy soil, then over a wide open field with isolated trees, where the village of Katiga stood in Baker's time. Now its inhabitants are located in two separate mountain villages. Then we went through extensive woods of acacia and Balanites, intercepted now and again by troublesome swamps, till at length, after a two hours' march, we reached the cultivated land, in the midst of which Tárangole, our headquarters in Latúka, is situated. The Lafit range is about four and a-half hours' march from here. A straight road leads right over it to the Bēr country, whence people frequently come hither for trading purposes.

Tárangole is the oldest settlement in this part. It was opened up twenty-five years ago by Danagla troops in the employ of Khartúm merchants, and since that time, with some few interruptions, it has been a place for the exchange of ivory. I say expressly "exchange," because, owing to the warlike

character of the inhabitants, the slave-trade could not be carried on here. Chief Maye, an old man, is still the nominal ruler of this country. He devotes himself, however, mostly to rain-making, whilst the real government rests in the hands of his eldest son, a bright young man, who speaks Arabic fluently, and who is in dress and manners the exact copy of a Khartúm dandy. Our military station is close to Khor Kōz, which here runs from south to north. The *khor* now contains good water to the depth of three and a half to four feet, which has formed wide sandbanks wherever possible. Fragments of granite and quartz, felspar, and mica are found there. From the thick belt of trees and underwood resounds the song of the *Aëdon*, and the strange bleating and cackling of *Schizorhis leucogastra*, such as we had heard in Loronio from their relations, *Schizorhis zonura*. They are strange, noisy fellows, now barking like a dog, now cackling like a hen, now bleating like a sheep, especially when five or six of them are chasing one another round the acacia and tamarind trees, wagging their long flexible tails up and down.

The acacia wood affords good tannin for curing skins, which process the Latúka turn to good account in preparing the small leather aprons so much worn by the fair sex. The soil, though swampy in places, is very superior. It consists of a soft yellow clay, mixed in many places with sand, and in other parts of a very black vegetable mould. Its cultivation is very easy, nothing more than the scratching up of the surface to a depth of four or five inches, as neither stones nor luxuriant vegetation afford any obstacle. Red durrah, a little sesame, and a great deal of dukhn (*Penicillaria*), are grown. Sweet potatoes, bananas, as also ground-nuts, were first introduced by our soldiers. Numerous herds of cattle and very superior goats and sheep pasture here, as Chief Maye has known how to protect them from the Danagla's love of plunder. The natives live about half a mile from the military station, in two large, well-built, but very dirty villages, full of watchtowers, dogs, women smoking tobacco, &c.

The Latúka are a peculiar race of men, quite distinct from all other Negroes about here. Of slight, almost elegant figure, with a medium height of five feet eight inches (average of twenty

measurements), they have beautiful large eyes, a high forehead, well-formed mouth, and good, well-set teeth, although they too extract the lower incisors. The face is oblong, the nose aquiline, the chin not protruded. Six skulls gave the following measurements:—From the tip of the nose to the occipital protuberance, 11.93 in.; from one external meatus to the other, across the head, 10.78 in. (average). Moderately small ears, large hands, and rather large flat feet complete the portrait of a Latúka man. The women do not appear to such advantage. They are rather too corpulent, and absolutely ugly.

On our arrival near Tárangole the porters' wives came more than half an hour's walk to meet their husbands. These women are fruitful, as the majority of them have three or four children, and families of five or six are not infrequent. Nine is said to be the highest number borne by one woman. Twins are rare, and are believed to bring misfortune to the father. Should he go buffalo-hunting after their birth, it is considered certain that he would be wounded or killed, and if he wounded an antelope, it would be sure to escape him. Men, therefore, who are under this ban do not leave the village until another woman has borne twins, or his own wife another child, in which case the spell is broken. The twins themselves, who, as among other Negro races, receive no proper name—a custom adopted from the Sudān Arabs—are brought up with the other children, and suffer no reproach.

The tribal marks in this district, besides the extraction of the lower incisors, are four incisions radiating over the temple from the corner of the eye, which are met by four others coming from above. Five more incisions are made upon the forehead, two on either side and one in the middle, all radiating from the root of the nose. The three spears and the helmet are also characteristic of the Latúka; bows and arrows are not used. Both sexes greet one another throughout the whole day with the word *Toggolo*, the answer being *Khummo*. Music and dancing are much enjoyed, and practised on every possible occasion. Hunting, however, is the pride of the Latúka; they are passionately fond of it, and will attack a buffalo with a spear, or receive a springing leopard upon their shields. It is only to be expected that such bravery is re-

warded by many a wound, and yet one rarely sees maimed people in the villages. If a company of people join together in a hunt, the booty is brought home, and the flesh of buffaloes, elephants, and large antelopes is divided amongst the inhabitants of the village. The chief receives, should he desire it, the head of the slaughtered animal. If a man goes out hunting alone, he keeps all that he kills. If a wounded animal escapes, it belongs to the finder; but if a wounded elephant dies in a neighbouring district, one tusk belongs to the finder, the other to the man who first wounded it, and its flesh must be divided in the village to which the finder belongs.

The breeding of sheep and cattle was once very actively carried on here, but now, with the exception of Chief Maye's numerous herds, only large flocks of sheep are to be seen. Cattle are only milked by men; the dirty habit practised by the Dinka, Bari, and others, of washing the milker's hands and face, as also the cow's udder and the milk-pot, with urine does not exist here. Butter is chiefly used for anointing the body, sesame oil being preferred for use in cooking. Blood is freely eaten. Durrah beer and tobacco are the only narcotics used. The tobacco is smoked in curiously formed pipes, and is mixed with two parts of charcoal, either for economy's sake or to increase the strength. Salt is an article in great request, and is obtained from the ashes of plants; saline clay is said to exist farther to the east, but the method of extracting salt from it is not understood. With the exception of iron, no metals are, apparently, found in the country. Copper and brass are imported chiefly from Khartúm, sometimes from the south, as also are cowries. There is no communication with the east except on the frontier of the country (Latúka). The Bēr country occupies a position to the north-north-west and north-west of this district; its inhabitants, several of whom I saw, are certainly Shúli. Irenga is the nearest district towards the east; it is also called Arenga, or even Renga. Its striking rugged mountains are partly visible from here; they are said to be distant three days' good march, and the road which leads to them passes over the Logere mountains, the inhabitants of which carry on a flourishing trade with those of Irenga. The language spoken in Irenga is quite distinct from the Latúka

and the Shúli, so is also the language of Akara, a country lying still farther to the east, whose inhabitants dress, and arm themselves with two spears, exactly like the Shúli. It is said that, at a few hours' distance from Logere, a stream called Tu, running due north, may be reached. Its broad sandy bed, covered with islands and boulders, brings down very little water (just like Khor Asua) throughout the year, except at the rainy seasons, when it is very full. On either bank there are dense woods of doléb palms, in which all kinds of game abound. There is said to be a much more important stream farther to the east, but no one from here has yet penetrated so far.

I attempted to compile a vocabulary of the Latúka language, and found that its idiom differs entirely from the languages spoken on the White Nile. A thorough investigation of it was, of course, impossible during so short a stay. The Arabic guttural *ghain* often occurs in Latúka, as in Shúli, and likewise a nasal *n*. *U* is employed as an article. Gender, when necessary, is marked by certain words placed before the noun. The cardinal numbers are not formed by combinations, but quite different words are employed. I cannot give any information about conjunctions.

The sky was overclouded when we left Tárangole. Taking a south-easterly course along Khor Kōz, through beautiful park land, we reached the ford in about half an hour. The *khor* was here about twenty-two yards broad, and full of yellowish water, which reached up to our thighs, and flowed over a sandy, rocky bottom. We had a pleasant march over a very good firm road through sandy country covered with open wood, the ground being rather wet in some places; the predominance of acacias (*Acacia albida*, *A. mellifera*, and *A. campylacantha*) and Balanites gave a grey tone to the scenery. Khor Oteng, now very insignificant, is said to pour such large volumes of water into Khor Kōz in the rainy season, that the passage is often rendered impossible for hours. The ford of Khor Kōz is called Chuchur; a splendid forest of doléb palms, yielding an abundance of odorous fruits, skirts the *khor*, copses of various other trees intervening. Large flat blocks of friable granite, with white streaks, lie across the road that leads direct to the foot of the hill of Loguren, which is about four hundred feet high.

Its summit is crowned with the dome-shaped huts of the village bearing the same name.

Dum palms (*Hyphæne thebaica*) grow here, as they do at the ford of Khor Kōz. It appears, therefore, that the southern limit of this tree runs along the Bahr-el-Jebel between Bor and Ladó, and then advances farther to the south, no doubt owing to the sandy soil which connects the Latúka and Somal districts. Picturesque groups of rock inhabited by the restless Hyrax, well-tilled fields, and here and there small clumps of doléb palms are seen along the road to Elianga, where, on the edges of the rocks, numerous clay vessels containing human bones seem to say, "*Memento mori*," a rather unnecessary warning in Central Africa!

We counted more than thirty mountains in Tárangole and Loguren; most of them are covered with forest. We turned next through a broad belt of palm forest towards Jebel Ghatal, which lies at a distance of about half a mile to the left of the road, and is dotted over with numerous villages; Khor Irume, which we crossed yesterday, flows between the road and the mountain. A long lofty mountain range running from the south and west stretches along to the right of the road; it contains the high peaks of Lavalong and Legiri (which belongs to Jebel Lotese). We rested under a tall tamarind, near a well full of good water. The inhabitants of the surrounding villages obtain most of their water from this well, for Khor Kōz is some distance away. The defile in which we camped is rather narrow, well tilled, and thickly peopled, although no inhabitants were visible. It runs to the west, through the mountain chain above mentioned, then to the east, through the prolongation of Jebel Ghatal (behind which the summits of Jebel Dongótelo appear), and ends in the south, near Jebel Sereten. The village Abure, high up on the slope of the mountains, overlooked our improvised camp, which was rather disturbed at night by numerous lions. A long row of hills, 100 to 120 metres high, runs in front of Jebel Bayango, to-d upon them all the villages in this neighbourhood are built. to t llel to them, on the right hand, the lofty Lomu range whic ls, from which Khor Ibiala descends in bold leaps to langua ōz. The view becomes a little more extensive here.

In a small opening before us were some fine trees, surrounded by young crops, which were divided into large squares by fences of brushwood and straw, as a protection from the water that rushes furiously down from the adjacent mountains. The very populous and independent district of Ikoto is characterised by excellent reddish soil; the numerous guard-huts in the fields were deserted, but here and there upon the mountains we saw small groups of people watching our march. A village must once have stood near Khor Iffune, to judge from the patches of castor-oil plants, the luxuriant Solanaceæ, and the durrah which had run to waste. From the summit of an adjacent hill I obtained a view over the mountains of the north-eastern Shúli district; Jebel Kuron, where a military post has just been erected, was certainly the grandest of them.

Leaving the Bayango range, we crossed the defile, and passing over hilly country bestrewn with rubble, we reached Jebel Khofír, a group of hills about three hundred to four hundred feet high, the spurs of which we had to mount after fording two small *khors*. Their stony declivities, strikingly whitish in colour, were covered at the top with thick brier brushwood, in which we noticed the dwarf tree, with reed-like leaves, called by the Shúli, Lakorta,* which we had seen last year near Chief Rochama's village, Biáyo; it seems, indeed, to grow on all the mountains of eastern Latúka.

From the heights of Jebel Khofír the lofty Irenga mountains came again into view. My guides pointed out to me the highest part, lying almost due east, as Jebel Zúmo. Farther to the north, a very high and apparently solitary summit they named Jebel Baya, and a little to the south of it a large but very distant mass, situated in the district of Harogo, they called Jebel Toë. We descended from the spurs of Khofír into a caldron-shaped depression, where we rested a short time by some wells, and then followed the path to the hills which form a continuous barrier at the foot of the huge Jebel Seréten. The acacia copse through which we passed was at first very thick, but soon became more open, and Khor Kōz, which hitherto had run at some distance from the road, approached very closely to

* Dr. Emin Pasha calls this elsewhere "Lakerda." See note on this name in the Index.—G. S.

it. Its sandy bed was about thirty feet broad, and studded with boulders, giving evidence of the force of its torrent; it only contained an inch or two of water, for no rain had fallen during the past few days. A little farther on we halted upon a prominence some thirty feet above the *khor*, after a march of nearly eight hours. We had now reached the end of the Latúka defile; on our left lay the spurs, or rather the prolongation, of Jebel Sereten; before us the extremity of Jebel Lomu, usually, but incorrectly, styled Jebel Tia, the name of a Latúka tribe, bent sharply to the south-west, permitting the Halanga and Langora mountains to be seen. They looked exactly like a continuation of this mountain, while the isolated masses of the mountains Oppei and Odia, generally named Jebel Mádi, filled up the gap. Behind us lay Jebel Seréten; Jebel Dongótolo and Khofír were far off on our right, and in the distance the Lodio and Kyelamin groups of the Lafit range appeared.

As soon as we had crossed the *khor*, which we then left for good, we passed out of the Latúka country and entered the Shúli district. Whenever I questioned the Latúka people concerning their traditions and genealogy, they invariably located their proper home, or rather the place from which they peopled Latúka, at Jebel Kyelamin, which points to a migration from the north-east. This tribe, which, although surrounded by the Shúli, has managed to preserve such a marked individuality, certainly deserves a more thorough study than I was able to devote to it during my short sojourn in the country. It would have been interesting to compare the vocabularies which I collected with vocabularies from the east (Kaffa, Galla), but they were not in my possession.*

We continued our journey over hard dry soil, which, almost purple in colour, and covered with thick acacia woods, was intersected at many places by countless runnels, and sometimes by deep ditches. In clearings we saw many Calotropis and various Euphorbia, one of which is particularly common in the south, and the *Acacia fistula* was also very abundant. A whole system of brooks converged here into the large Khor

* [See Index.] They are Masai, as I discovered on examining Emin's vocabularies.—E. G. R.

Alare, along the broad sandy bed of which we had to walk for some minutes. That very large volumes of water must often be carried down this channel to Khor Kōz was very evident from the steep fall of the bed, and the piles of rubbish and fragments of rock upon its sides. One hill followed another, and the ascent, which had been quite perceptible from Tárangole, now became steeper and steeper. We first crossed Khor Loppolo, which sends its waters into the Khor Agaru; it came straight from the mountains, had a deeply cut channel, and even at this time of the year contained a little water. A short halt enabled us to obtain a good view of the little station at the foot of the high Kela hill. A quarter of an hour's descent, in a more southerly direction than we had previously followed, brought us to Khor Okóra, a foaming mountain torrent, which contained colder water than I had ever before found in Africa. This *khor* skirts the Kela hill in a narrow channel, twenty feet deep in some places, and then meanders on towards the south. The station of Agaru is situated on the southern slope of the hill.

2. From Agaru through Fadibék to Fajuli and back to Fadibék.

SITUATION OF AGARU—RESEMBLANCE OF ITS INHABITANTS TO THE SHÚLI—LANDSCAPE SCENERY—GAME-PRESERVES—SAVANNAH-LIKE CHARACTER OF THE COUNTRY—GEOGRAPHICAL INQUIRIES.

Agaru is still one of our advanced posts. It is situated three days' good march from our nearest station in Latúka, a day and a half's march from Fadibék, and three or four days' march from Fajuli. The lofty Langia range forms a large crescent as it runs from the east by the north to the west. Towards the western extremity of its convex side is situated the Kela hill, close by which our station stands. The mountains, which are partially wooded, are composed of masses of primitive rocks, a grey granite speckled with black predominating. The gleaming threads of the two mountain torrents, Amok and Okora, may be seen descending the Langia and uniting about

twenty minutes' walk behind the Kela hill, whence, under the name of Okora, they descend over ledges of stone in a south-easterly course, forming beautiful cascades. The bed of the torrent is an exceedingly narrow trench, the walls of which are steeply scarped on the eastern side, and are about nineteen feet high. Their upper stratum, some fifteen feet thick, is composed of very close reddish clay, with hardly any intermixture, beneath which there is a layer of sharp-edged stone fragments cemented together with clay and mud. In the bed lie granite boulders, which compel the brook to follow very fantastic windings. I was told that the Okora, which is fed by springs and contains water all the year round, loses itself in a swamp farther to the south-east. From the summit of the Kela hill an entirely new and extensive mountainous country is visible towards the south and south-east, whilst to the east the view is shut out. Jebel Pale looks very striking, with its three sharp towering horns; it lies in the Lángo country, as the people here call all the unknown district situated to the south and south-east. To prevent future travellers from making mistakes, I would call their attention to the fact, that when Negroes and interpreters are asked the names of mountains and countries, they generally give at first the name of the chief or tribe dwelling at the place in question, and only state the real names in answer to further inquiries. Thus, for Jebel Ogilli one usually hears Woll, which is the name of a tribe; Jebel Oppei is called Mádi, and the district of Lirēm is designated Aje, also the name of a tribe.

At the foot of the Langia range there lies a small and exceedingly fruitful plain, thinly wooded in parts, and affording very good pasture for cattle and sheep. In this locality, cattle are distinguished by having their ears lopped or pierced; pieces are cut out of them, fringes are made at their edges, and they are twisted into curious forms, so that every cow-owner has his private pattern of ear.

Native huts and *zerîbas* are scattered far and wide over the Kela hill and the surrounding country; small terraces are built for single dwellings right up to the peak of the hill, which is about 250 feet high. The style of the huts is similar to those in the Shúli and Shíluk districts, but they are generally smaller, and have a thicker roof, for protection from the cold. Oven-

shaped corn granaries, huts for young girls, numerous votive huts, adorned with Achatina shells and horns of dwarf antelopes, all exist here, while now and then, in the background, can be seen a smithy, and the erections, so common among the Shúli, where men and women hold their separate meetings and gather together for conversation, are not wanting. There is usually one of these men's meeting-places on a terrace at the entrance of a village. Stands for hunting-trophies, consisting of horns, skulls, and jaws of slain animals, are to be seen, as also trophies of every variety of antelope that exists in the country, and of buffaloes, giraffes, zebras, and other animals of the cat tribe. There are said to be no lions here. Leopards live among the crags and rocks; wild cats and hyænas are plentiful, the latter being notorious sheep-stealers. The inhabitants are Shúli, and therefore good hunters, but they cannot compare with the Latúka. Their arms—two spears only—their frisure, and their ornaments are identical with those of their southern kin. The women, too, resemble them in being almost entirely without clothing.

A boiling-point observation gave 3700 feet for the height of Agaru, and the necessary corrections should make it still higher. It is evident, therefore, why Agaru has always been considered a kind of sanatorium on account of its climate, a reputation which it well deserves.

Like Latúka, Agaru should yield many treasures to the collector. I found a weaver-bird, resembling the *Hyphantornis Spekei*, but differing from it in its white under jaw and throat; it is probably a new species. For the first time I met with the superb *Pholidauges leucogaster*, which appeared to be passing in small noisy flocks to the north-west. The beef-eaters (*Buphaga erythrorhyncha*), which prove a sore pest to the cattle, were particularly numerous and bold. Kingfishers (*Halcyon semicærulea*), the beautiful *Ispidina picta*, and bee-eaters (*Merops Bullockii* and *M. pusillus*) sat on the bushes catching insects. The hoopoe (*Upupa epops*) is also fairly common. Fringillidæ appear in legions at this season of the year, being attracted by the ripening corn. While in Tárangole the place of the house sparrow is taken by the *Philagrus melanorhynchus*, it is here represented by the *Passer Swainsoni*, a bird of the

same group; neither of them, however, build their nests in the huts. Altogether, the feathered fauna of this country is more closely allied to that of Abyssinia and the Somal country than to that of our province.

The march from Agaru to Fadibék is accomplished by the natives, and also by our own men when they have no baggage, in one day, although we spent exactly eleven hours fifty-five minutes over it, marching rapidly. The Langia range, with its summit Logiteli, crowned by the village of Loggede, pushes its last offshoot, the small round peak of Lara, far out into the bush; here the first halt is usually made beside a pool, round which flutter hundreds of small white butterflies with red-tipped wings. From this point another mountain range, known as Jebel Júlu (?), forms a crescent towards the west. Our road followed the chord of this arc through thick forest and occasionally high reeds, the ground being frequently intersected by narrow yawning clefts. A rather steep descent marked the extremity of the range, and then, to the right, the long chain of Laburomōr came suddenly into sight; it seemed to run partly behind the other range. In front of us, but a little to the right, rose the grand Jebel Lamo, between it and Laburomōr the summit of Jebel Aggu was visible for a moment, and at the extreme end of the Lamo, which has a north and south axis, Jebel Lalak and Jebel Latjiet (Fadibék) made their appearance.

The country, covered with bushes and briars, was very monotonous, for the view towards the mountains in the east was shut out by high grass. A luxuriant bed of reeds preceded the belt of wood by Khor Arenga, which flows to the south-south-east, and though only sixteen feet broad, contains a very strong current of cold yellow muddy water, reaching up to the knee (it is never lower). The springs which feed it lie in the Laburomōr mountains; it empties itself, as we discovered afterwards, into Khor Bagger. The large village of Uong stands on the heights of Jebel Lamo, and its fields, which are subject to the ravages of thousands of finches, extend along the foot of the mountain. Jebel Lamo is often called Jebel Falogga, after a large Negro village, one of ten that are situated on its flanks.

A sharp turn to the north took us out of the proper road through luxuriant corn-fields and past fine masses of rock, where huge fig-trees and tamarinds were growing, to the village of Uallo, the chief of which wished to submit to our Government, but wanted to see me first. After the necessary details had been discussed, our new ally conducted us to Khor Wodbala, a broad swamp, on the western edge of which we intended to pass the night. While gathering wood, I found in the hollow of a tree, about six feet above the ground, three fully feathered fledglings of the *Daccelo chelicutensis*, with striped heads, white collars, the lower part of their beaks and outer feathers of their pinions being blue. Hence it is quite certain that this bird builds its nest in hollow trees, or at least can do so occasionally, a fact quite in accordance with its habits. Hilly country stretches from the *khor* towards Jebel Lalak as far as a deep ravine, which separates it from the corn-fields lying at the foot of that mountain. Quantities of bamboo and Anona were growing along this road. We ought to have been able to get porters at the village of Jangbi, but failing to do so, we went on through high grass and rushes until we reached the fields of Fadibék, and striking across the hills that radiate from Jebel Latjiet, and on rocky parts of which were some fine *khaya*-trees, we descended the hill, and after passing Chief Aguok's village, we reached the station of Fadibék just in time to escape a downpour of rain.

I gave some information about Fadibék on the occasion of my last year's expedition; I have therefore only to add that the station has prospered, and still remains the centre for the eastern Shúli district. The continual rain made outdoor work disagreeable, but I had one good ornithological find in the graceful *Ptilopachys ventralis*, whose sharp cry at coupling time is heard from the crags in the Shúli country. It is the best game found here. I also found a large spider, a new species.

Our route from Fadibék to Fajuli should have taken us first to Jebel Abayo, in the district of Labongo, which we visited last year, and then we were to leave the Fatíko road on the right. But the path proved to be rather different from that followed last year, for it led across the Abanya hill, and

past the huts of the village of Mádi, which was deserted last year on account of sickness, and finally turned through grassy flats and very numerous bamboo copses straight to Jebel Abayo, passing round which, in a sharp curve to the east, it brought us to a rocky hill at the eastern declivity of that mountain. There we halted, and obtained a glorious view to the east and south-east over blue mountains which no European had hitherto seen. Last year thick mist partly concealed the horizon, and it was impossible to obtain any compass bearings. This time also an evil star seemed to rule, for the interpreters I had brought with me became confused in giving the names, and contradicted one another, which was very annoying, for some forty mountains and mountain groups were in sight. So I only accepted those names which were given me unanimously, and left the rest to fill in at favourable points along the road from native information, a plan which proved successful beyond my expectations.

A long row of doléb palms marked the course of Khor Funotar, a tributary of the Bagger, to which we next made our way. Darkish water flows down the rocky bed of the *khor*, but is good for drinking. Up to this point the country is covered with brushwood, interrupted by corn-fields, high grass, and bamboo copses. A large savannah, grown over in parts by low brushwood, commences here; it is crossed by numerous rivulets, all of which run into Khor Bagger. When we passed through it the grass was already very high. I may mention that all these grassy flats found in the Shúli and Mádi countries, and often twelve to fifteen hours' march across either way, are purposely left unoccupied, as preserves for elephants and game. Jebel Goma, which on this journey was occasionally seen far off to the right, was an old acquaintance. The rushing water of Khor Bagger, to which we descended, struggles through acacia bushes and over patches of sand and slabs of mica schist, and is audible at some distance. Flowing in a curve from east to west, it is here about forty feet broad, and pours down its rocky bed a volume of water, four to five feet deep, into Khor Asua, which, without it and the Atappi, would be only a rain-torrent.

We crossed the *khor* without any annoyance from crocodiles,

and, upon an open stretch of land just beyond it, I was able at last to take the compass bearings necessary to complete my observations made on the Abayo, the country to the south alone being veiled by clouds. A grand panorama was visible —the Agaru group, the solitary forms of Lalak, Lamo, and Aggu, the syenitic dome of Abaya, which we had passed on the road, and even the distant Seréten. All the groups of the north-east Shuli district, as far as the Kuron and Kiteng, including the very striking three-pinnacled Akkara group (Jebel Pale); in front of us, the imposing masses of Ogilli, Paimōl, and Mora, between which appeared the pointed Farabongo; and finally, the grand masses of Okaga—a far more magnificent scene than that presented by the eastern mountains, because the outlines are more jagged and bold than the rounded summits of the more northern ranges.

The Languello hill, which we next climbed, rises from a sort of plateau, and on its summit we found large reservoirs of water, in which small flocks of widow-ducks (*Dendrocygna viduata*) were sporting. My men ate freely of the fruit of the wild vine, growing all round; its ripe black grapes are not juicy, but very pleasant. A fine sycamore and a solitary dolób palm beside it form a prominent landmark, visible for a long distance in this scantily wooded country; they announced to us the proximity of our camping-ground, under a stunted tamarind, beside Khor Dore. This spot had been chosen because of the abundance of water and of bamboos, which supplied good material for hutbuilding. The latter part of the savannah is crossed by broad hollows overgrown with rushes; these hollows are probably swamps in the rainy season. Then followed open wood with groves of Amomum, until, after a good three hours' march, we reached newly tilled land, and ascended a good road on clayey soil, through a fine forest to the Leruama hill; then, through the corn-fields which surrounded the little village of Tingtum, we reached the village of Lira, situated on the ridge of the hill.

After a short rest here, we proceeded to Jebel Uyugu, where the cultivated land is surrounded by fine forests with large dark masses of foliage, a rare sight in the Shúli country. A number of barked trees showed that the inhabitants kept bees, for

baskets made of bark were hung on the trees. The short stretch of land from here to Jebel Gikkōr, one of the many lofty hills in this region, is fairly well wooded, and crossed by two small watercourses. Here, too, we saw clumps of butter-trees. Larema, a Negro village at the foot of the hill, had been deserted, because the soil was exhausted, and its inhabitants had built another village upon the hills of Loto, which may, in its turn, be deserted in three or four years. Durrah soon exhausts the soil, and the varieties of beans, which are extensively grown here, exhaust it still more rapidly. Manuring is not dreamt of, a change of residence being preferred. We had therefore to camp in the forest, where we were able to admire the abundant succulent sword-grass growing there, and still more the full grandeur of a thunderstorm which came from the south-east, accompanied by a deluge of rain, turning the country into a lake in a few minutes.

Before the rain fell, however, I had been able to climb Jebel Gikkōr, and to take from its summit a series of bearings, which was fortunate, as Jebel Oppei, near Agaru, and Jebel Abayo were visible. Such bearings give a good basis for laying down routes. A correct triangulation could easily be made from this point, were time and instruments at command.

The farther one proceeds to the south-east, the more savannah-like does the country become; and the Lángo country has the same character, if those who have been there may be believed. While at Jebel Gikkōr there is still to be seen a small wood, the red or chocolate-coloured country beyond it is only covered with high grass, or, in moist places, with reeds and Cyperus, scarcely a tree being visible. In front of us neither mountain nor hill could be seen; only the far-stretching undulations of the country were to be distinguished, as it gently rose and fell beneath corresponding waves of grass. To the north, the land rises, following the general dip of the country towards the south; otherwise there is nothing but wide undulating grassy tracts, and a semblance of woods in the distance, due to the perspective accumulation of the few trees.

The station of Fajuli, situated amidst such surroundings and built in a sort of caldron, is not a very desirable place to

stay in, as may be gathered from what has just been said, but it is exceedingly important as a centre for trade with the Lángo districts to the east and south-east of it. Ivory figures here as an article of commerce, as well as ostrich feathers, which, hitherto neglected, are to be procured in large quantities, for the broad savannahs of the Lángo country harbour large numbers of the birds. I have therefore given such orders as will not only render the collection and transport of the feathers profitable to the people, but will also ensure the erection of enclosures for ostriches in all our stations, and the introduction of ostrich farming. The eggs are hatched by the simple method of placing them within heaps of corn, the warmth of which effects the purpose.

Fajuli, having no streams, is supplied with drinking-water from several wells which lie at the foot of the hills forming the caldron. The largest of these reservoirs lies about a quarter of an hour's walk to the south of the station, being about half a mile long, and six feet deep. Milk-white quartz is seen round its edges. The water is yellowish, and has a slightly vegetable taste. The supply throughout the year is sufficient for the station as well as for the neighbouring Negro villages.

According to information obtained here, the following countries and districts succeed one another from the south to the north-east. The district of Umiró extends from the south-south-west to the south-east, and appears to be the largest and most extensive of the Lángo countries. It has already been mentioned by Speke under the Kigánda name of Kídi. It is divided into numerous small districts, where different dialects are spoken, and which are ruled over by small chiefs. In the south-east, towards Usóga, there are permanent villages. Farther to the east the inhabitants are nomads. The nearest *zeríbas* may be reached from Fajuli in four days. The road passes through the village of Konaa, in the Lira district, to the villages of the Jāle district. Five days' march to the south-east leads you to the country of Lobbōr, which is very mountainous. The inhabitants of Faratjell, who are much molested by the people of Lobbōr, brought me a spear, a very small shield of giraffe's hide, and some

unique head-dresses, made of beautifully dyed bird-skins. In Lobbōr they speak a language of their own, as well as Shúli. Lirēm, or Lorēm, adjoins Lobbōr on the north, and is also called Aje, after its inhabitants; it is very populous, and may be reached from here in five days, by way of Jebel Facher, in an almost easterly direction. The district of Koliang lies next to that of Lirēm. Behind it, towards the east-north-east, is the district of Bognia, visitors from which proved to be of the Lángo type, with oval faces, flapped head-dresses, and cowrie ornaments. Turkan, the sandy country lying to the south, sinks in broad terraces, and possesses only a little brackish water. Many mountains are however visible. Its inhabitants are nomads. My men compared the vegetation there to that of southern Kordofan. A sweet-scented Lawsonia and large acacia woods are very abundant. I was told of the phenomenal springs of Natefár, occupying a deep circular hollow in the ground, which is filled with soil resembling "ashes," and from which abundant supplies of good sweet water can be obtained by digging. Directly behind Lobbōr lies Termayok. The district of Rōm adjoins Koliang on the north.

I give these notes with great reserve, especially with regard to bearings, as my information was gained from Negroes; all being well, I shall myself visit these countries in order to inspect our stations.

The zoological specimens I obtained are scarcely worth mentioning. *Zosterops senegalensis* and *Tricholais elegans* are very common; *Zonogastris phœnicoptera* is rarer. We lost a large black and white bird (perhaps a shrike—*Urolestes*) in the high grass.

We were obliged to return by the same route, as our time was limited. The country being flooded, owing to the almost incessant rains, and every runnel of water having been transformed into a gushing torrent, the passage of which caused much delay, we got no farther on the first day than Jebel Leruama. A night march enabled us to traverse the waterless tract, which extends to Khor Dore, during the cool hours, but we had to submit to a cold bath in the tall grass. It is particularly unpleasant to march through extensive corn-fields, for

not only do the stiff stalks strike sharply as they rebound, but they also rain down a constant shower-bath from their panicles. I procured some ducks for the cooking-pot on the Languello hill, and also took a series of compass bearings of the surrounding mountain peaks. We then proceeded to Khor Bagger, which, though much swollen, could be crossed by swimming; but when we prepared to stay there for the night, neither wood nor bamboo could be found for hutbuilding, and so we had to continue our march until we reached the place where we had stayed on the first night of our outward journey. We arrived there in rather more than three hours, having thus been marching for eight hours forty-five minutes altogether, and at a rate exceeding two and a half miles an hour, whilst on the outward journey the same distance took us ten hours. We saw small troops of buffaloes on our way, and two extremely large snakes—not pythons—which we did not succeed in catching. The rain, which had been so excessive at Fajuli, did not seem to have extended to this place, for the ground was hard and dry. We had no view from Jebel Abayo, but that is usually the case at midday, when the distant mountains are veiled in mist. Having changed our porters, we kept mainly to our old path, and reached our station at Fadibék, where, however, we are only to have one day's rest.

3. From Fadibék *viâ* Obbo to Labóre.

THE VILLAGE OF MÁDI—THE SO-CALLED MÁDI PEAK—IN THE FANYIQUARA DISTRICT—ABUNDANCE OF STREAMS—THE FAGGAR-KEREFI ROAD.

We followed the path we had traversed last year as far as the village of Agoro, which is situated among picturesque rocks and luxuriant verdure. Every now and then we saw the peak of a high mountain due north, but no one could tell me its name. It was said to be in the Bari country. The village of Mádi appeared even more neglected than last year, when it was at least hedged round with a bamboo fence. The pre-

dominance of girls in all the villages about here was very striking; I had already noticed it in Fajuli.

From Mádi, we had to diverge from our last year's road and take a path which led across the two small *khors* of Okora and Faggara, both of them full of water, and then reached another *khor*, by which the station of Farajok is situated. The march was almost barren of topographical results, for clouds completely veiled the mountain chain running along on our right, and only the solitary groups of the Lalak, Aggu, and the smaller Akuero, lying in front of the chain, were momentarily visible now and then. A wide rolling plain, with luxuriant grass and very little timber, stretched out before us to the west and north-west, and wherever depressions existed there were muddy ponds or immense reed thickets, from which *Centropus monachus* could be heard, while a species of weaver-bird (*Euplectes franciscanus*) and the widow-bird (*Penthetria macroura*) climbed about the stems. Shortly before reaching the village of Miri, the road entered durrah-fields, which covered the hillsides, enclosing small villages, and it then descended to Khor Limur, a clear stream flowing over granite slabs. The little station of Farajok is picturesquely situated on its northern bank. It was erected to protect the road from Fadibék to Labóre, which here branches off from the Obbo road.

We passed through Yuaia, and halted at a little place called Latinotó, where dome-shaped rocks afforded a good view over the country. Since leaving Mádi, we had been continually marching through durrah-fields. The Shúli only eat red durrah in cases of necessity, when, for instance, the eleusine crop fails; as a rule, they employ it only for brewing beer, so that the consumption of the latter article must be very considerable. The long mountain chain named Lobull, running up from the south, is ten to fourteen miles distant, to the right of our road; it must be about 3000 feet high, while its principal summit, Lumoga, probably attains to 4000 feet. Whether this is the "Mádi Peak" of the maps I cannot say, but I know that no peak exists in the Mádi district, and Jebel Lumoga, in the Shúli district, is not, properly speaking, a "peak." The traveller soon finds out how thoroughly defective are the few existing maps of this country.

A slight ascent soon brought us to a row of hills running across our route; a lofty hill named Aliagár lay to our right, and to its left, overtopping it by some 200 feet, was the hill Ummoda, which we climbed. Jebels Latjiet, Lamo, and Lalak now lay behind us; the Lobull chain ran from east to north, with Jebel Aggu and Akuero standing like bastions in front. To the north and south-west a long row of mountain groups was visible, among which was the twin pyramid of Jebel Okirri, probably more than 5000 feet high, which is perhaps the same mountain as that pointed out to me from the ridge of Jebel Oppone, in the Liria district, and called Jebel Ekara (Bari), and which was named Jebel Chufal in Latúka; at any rate, it is identical with the mount "Asal" ("honey") of Baker's map. I made the acquaintance here of Jebels Kaffai and Lokalla, and saw my old friends Jebel Remo (Mádi-Lokoya) and the Farshile range, for which I heard for the first time the general name of Jebel Areda, Jebel Arda ("mountain of the termites") probably being a corruption of this name.

Khor Atappi, or Atabbi, was reached at noon, and forded; it rises in the Jamma mountains (which form the southern end of the Lobull chain), at a long day's march from Fadibék, and at the ford it flows from east to west, between gently sloping banks. It is about forty feet broad, with swampy approaches, but easy to cross, although there are some rocks in its bed near the northern bank. The rise of the country at first sufficed to conceal the mountains in front of us, and in the early morning we could only just see the contours of the Lobull range, which stood out sharply against the nocturnal sky. We marched through the same monotonous undulating country as the day before. From Jebel Chamma, a somewhat higher hill, the grass became very troublesome, and briars foretold the approaching jungle, in the midst of which were the durrah-fields of a little village named Dogovura, which was hidden in a thicket of castor-oil bushes. Khor Ayi, which we next crossed, was fringed by a fine belt of trees, but had such muddy banks that we sank in above the knee; throughout the year it contains clear but rather yellowish water, and is said to flow into the Bahr-el-Jebel. A short ascent through woods brought us to the little station of Obbo, erected only a

few months ago, and very important as a junction of the roads leading to Tárangole (two very hard days' march), Fadibék (two good days' march), and Labóre (three long marches). A boiling-point observation gave the height of Obbo (which is not, by the bye, on the site of Baker's Obbo) as more than 3000 feet.

Obbo is the most northerly outlying division of the Shúli country, not counting Bēr, which is cut off by Latúka; Latúka tribes dwell to the north-east (Jebel Ifuddu), Bari to the north-west, and Mádi to the west. The people have adhered very faithfully to their Shúli manners and customs, and the language spoken in Fajuli is perfectly identical with that spoken here. "Old Kachiba," the rainmaker, died long ago, and was succeeded by one of his 120 sons, but the people are still hospitable, friendly, and obliging.

Very hilly country, covered with high grass, and in many places with thick brushwood, extends from Khor Ayi, which we forded, to Khor Ovidda, which loses itself in a ravine, and seems in places to be blocked up with boulders. In spite of the mountainous character of the country, it sinks so much that the aneroid fell from 26.56 inches at Obbo to 27.05 inches at the latter *khor*. The whole land is hilly, and intersected by very numerous small *khors;* it is industriously cultivated, and its alternate fields and park land present an exceedingly diversified aspect.

Ogilli, three and a half hours' distant from Khor Ovidda, is the first and the principal *zeriba* of the district of Fanyiquara, which we entered here, the Ovidda being the boundary both of the Obbo and Shúli districts. The population of Fanyiquara consists of Mádi; they are easily recognisable by their language, which is similar to those spoken on the west of the river. After a farewell look at Jebel Okkiri, the march was recommenced, for the chief of Ogilli kindly supplied us at once with men to carry our few loads. The little *khors*, most of which were dry, became so numerous that in a quarter of an hour's march we had crossed four of them. We were still in a mountainous country, where the rain was powerful enough to excavate channels even in stone! The ground, which had fallen, began to rise again perceptibly towards the ranges of

hills in front of us, which formed part of the mountain system that extends from Dufilé, and follows the eastern side of the river as far as Labóre. Cultivated fields and small villages were scattered among the hills, and the scenery was very lovely, so that the march was a pleasant one, especially as the way led over level red clay, free from briars and other obstacles.

The village of Fagger, the huts of which are scattered over a large circular terrace, is the capital of the Fandikér district, and is encircled by a chain of hills. Crops of durrah, eleusine, tobacco, and sesame grow here, and the little Mádi cucumber twines itself about the stalks in every direction.

Little remains to be said about the road from this point to Kérefi and Labóre. The porters supplied to us at Fagger begged permission to start early and go on in advance, in order to get back here again in good time from Kérefi, so two of our men were sent with them, and we followed more leisurely, through mist, which was so thick that we could only just manage to find the path. We did not, however, lose much as regards scenery, for the open forest, covering consecutive rows of hills, was very uniform, and was only varied at times by a rich growth of vegetation near some of the numerous *khors*. Crossing Khor Yibi, a broad stony, dry ravine, we came to the village of Déreto, which was quite hidden in corn-fields, and here we were annoyed to find that the Fagger porters had no sooner laid down their loads, ostensibly to take a rest, than they disappeared. Déreto was quite a small place, and though Chief Yata did his utmost to get our things carried on, he could not find enough porters, so we had to march two hours farther to Kérefi, and send back some of the porters from there. The path led over red clay completely covered with rubble, and slightly down hill through park land and woods, with here and there a solitary pile of rocks. Kérefi itself had undergone no change since last year; I even found my old huts standing.

The road we took from here to the river deviated slightly from that followed last year. The names I heard for most of the *khors* were different from those given me last year, but I am inclined to prefer the ones told me this year, because my guide belonged to this place, and seemed to be well informed. The red sandy flats which extend from Khor Merve to the

Kuitu hills are overgrown with acacias, Balanites, and, unfortunately, with Randia also, and glossy thrushes (*Lamprocolius chalcurus*) were flitting over them in remarkable numbers. The weaver-birds, still moulting, were busily repairing their hanging nests, which shows that the rainy season has not yet set in here. The handsome *Astur metabates* is very common everywhere, and seems to take the place of its northern relative *A. polyzonus*. We descended by rather steep natural stairs to the river, which we reached exactly two hours thirty-four minutes after we had left Kérefi, as compared with two hours forty minutes last year.

Having been ferried across the river, which was already (May 26) swollen with rain that had fallen in the south, we soon reached Labóre, and there ended our expedition, which I hope has not proved altogether fruitless in regard to the geography of this district.

4. From Labóre *viâ* Fadibék to Fatíko.*

OPPOSITE LABÓRE—A MÁDI FUNERAL—CONFUSION IN THE GEOGRAPHICAL NOMENCLATURE—MÁDI VILLAGES—BARI DISTRICT—KHOR ATAPPI—THE HOT SPRINGS OF KHOR ASUA—A GREYISH-GREEN LANDSCAPE—ETHNOGRAPHICAL NOTES ON THE SHÚLI—FADIBÉK—A LAND OF THORNS—SHÚLI HUTS—APICULTURE—CHIEF AKUÓK—SHÚLI SMITHS—SHÚLI CUSTOMS—THE VIEW FROM JEBEL ABAYO—FRIEND ROCHÁMA'S WELCOME.

The ferry across the Nile near Labóre lies about two-thirds of a mile above the station on the way to Khor Ayu. As the river there is scarcely more than 200 feet broad, it did not take us long to cross, and we landed a little farther to the

* A letter forwarded with this paper to Herr Hansal, the Austro-Hungarian Consul at Khartúm, dated Wádelai, November 28, 1880, reads as follows:—

"The notes contained in the enclosed pages were collected and compiled during a tour of inspection in the south; their somewhat cursory form may perhaps be excused, on the ground that I had neither time nor inclination to round off and polish materials collected in the midst of grass and thorns. If, therefore, I venture to request that the notes may be kindly forwarded to the "Royal and Imperial Geographical Society" in Vienna, to be used as thought best, it is because the

north, having been carried somewhat down the stream by the current. The bank is about five feet high; it is formed of alluvial soil, and is well wooded. The current presses upon the western bank, as is made evident by the existence of numerous islands on the eastern side, which is not exposed to the destructive action of floods. The chain of hills which runs along the eastern side of the river from Muggi is here called Kuitu, and is only separated from the river by a narrow strip of land.

territory I passed through, although partly traversed by other travellers, has been but very inadequately explored, and still more imperfectly described, so that fresh information is desirable."

"I should certainly have pushed on from Fadibék eastwards, where a *terra incognita* awaits the traveller, if it had not been for limited time and numerous administrative duties elsewhere. As it was, I had to be satisfied with what came under my notice in the districts nearer my headquarters, and I can only claim the indulgence of the Society for the insignificance of the gift I offer it. I was unable to map out any routes, owing to a severe wound, which rendered my journey from Fatíko to this place very trying, especially as no riding animals were at my command. In what direction I shall next direct my steps I cannot at present decide. Should I find it possible to go by land from here through Lúbari and Kaliká to Makraká, I shall certainly do so, but if not, I may probably go through Ladó straight to Monbuttu, and from there open up a route to the lake. As the result of my journey, I have some fresh supplies of ivory ready to be sent off, besides which, contracts have been made with the southern chiefs for further supplies, and so I hope that the Government will be satisfied. I have received a friendly invitation from Chief Mbio, who has been considered unapproachable for the last eighteen years, and I intend to avail myself of it, for the wealth of this Nyam-Nyam ruler in ivory has become almost proverbial, and I have always had at heart the opening up of friendly communications with the native chiefs. My men are at present engaged in the erection of a new station at Lógo, and Mbio's invitation reached me through them. Two new stations have been erected in Latúka, and a third is to be established in Bēr. I have established a station at Fadibék, with sub-stations in Agaru, Fajuli, and Fatánga—the latter is not yet erected—as well as stations in the south. We have advanced from Wádelai to Okoro. So much for my year's work."

"There are in the province about 1400 officers and soldiers, and about 200 irregulars."

"As usual, I have endeavoured to collect zoological and ethnological specimens, and shall venture to send to you by the next steamer all I have."

"I am unable to communicate any fresh news from Ugánda. The men last sent to me by Mtésa, with presents and letters, found Mrūli deserted, and fearing lest their retreat should be cut off by Kabréga's people, they returned at once to Ugánda, while their letters reached me through Riónga's men. I am now expecting men daily from Kabréga, and, should they come, I will quickly re-establish my relations with Ugánda. The chief of Tóru has offered me a free passage through his territory."

Scattered granite blocks mark the ascent along which our road led up to the ridge of the hills. Open wood and high grass, with bushes of all sorts, Zizyphus, Balanites, and abundant Randia, covered the ground and shut out nearly all view; now and then we saw for a moment the peaks of Jebel Foki and the broad back of Atikki.

The road wound at random through the rank grass, in which bamboo but seldom appeared. After crossing Khor Tipalanga, a distant view was obtained of a chain of hills, the general direction of which was about parallel to the road, but slight deflections occurred where small streams flowed through gullies to the river. Several small Mádi enclosures formed the village of Oō, which stood on a ridge above Khor Merve, in the midst of pulse and hibiscus plants. Large quantities of a cucumber called by the Mádi *urdzu* lay in front of the huts, and a high termite hill in the centre of the village afforded a view over the country, and enabled me to take compass bearings. The rise from Labóre to this place is very considerable; the aneroid here read 27.87 in., while at Labóre the reading was 28.02 in. A short march brought us to Khor Kilive, the largest stream in this region; it is probably never dry, for prolific vegetation grows beside it, and crops abound in the neighbourhood. We reached the *zeríba* of Kérefi, our night quarters, after a march of exactly two hours and fifty-two minutes.

The night before our arrival a leopard had made its way into the little village and killed a man, consequently we had the opportunity of witnessing a funeral. A circular hole, about three feet in diameter and five feet deep, was dug in front of one of the huts, and the corpse, clothed in a skin, was placed in it in a squatting position, with arms and legs drawn up. Then earth was shovelled in and stamped firmly down, and the grave was covered over with stone slabs. The bereaved wives, who were now inherited by the son of the deceased, wept in an orthodox manner during the ceremony, and when it was over everybody went about his business. I was told of a curious belief existing in a village not far from here, whose inhabitants are said to have the power of turning themselves at night into leopards and of killing and devouring men. I remember hearing of a

similar belief in Unyóro, and on the Blue Nile the legend of "hyæna-men" is absolutely believed.

There has been a drought here this year, and therefore there is a good deal of poverty in the villages, but, notwithstanding this, our porters were given some corn to eat. In the middle of the village, which consists of the usual small Mádi huts, infested by bugs, the mother of the reigning chief is buried; a flat stone and several long poles, on which hang amulets, mark the grave. The father of the chief is buried at the entrance of the village, his grave being marked by an upright stone about seven feet high, and a post notched at its upper end. Wooden memorial figures, like those placed in the Bari burial huts, do not exist among the Mádi. Large heaps of sycamore figs lie in front of the houses. Scrotal hernias are exceedingly common here among the men.

Descending the hill from Kérefi to regain the main road, we had to cross a little *khor* which winds round the hill and then joins Khor Kilive. We passed numerous enclosures surrounded by well-tilled fields, some of them belonging to the village we had just left, and the others, from Khor Lekir onwards, to the community of Abásа. Baker's district, Fanyiquara, does not lie near the river, but is merely a village community to the south-west of Obbo. Fine tall trees were left standing in the fields and clearings, and in their branches we heard the cackling of the plantain-eaters (*Schizœrhis*). The range of hills to the west of the Nile presented a wondrous view, the glowing shades of blue being relieved by a shifting veil of white and grey clouds. After this the ground rose again considerably, and when we had passed Khor Lebbii, Jebel Mádi-Lokoya (named Madi-Lucquoia on the maps) came into sight; this latter name was probably heard by Speke from the Danagla who accompanied him, but the mountain is called Remo by the Mádi, and appears as Bemo on Grant's excellent map. The village of Odúkwe, where we stayed the night, was situated, like all Mádi villages, upon the ridge of a hill, and, in contrast to the general rule, was surrounded by a very strong *zeríba*, and, for a wonder, it was very neatly kept. Outside the village stood a tall, magnificent tree, a Khaya (Mádi, *Eri;* Shúli, *Tido*), specimens of which are met with rather frequently from this latitude south-

wards, and, like the Soymida, are quite ornaments to the forest. The fruit is the size of a small apple, and enclosed in a hard, woody shell. Jebel Remo, the slopes of which are scantily wooded, stood out here in a very imposing manner.

The small districts which surround this place are as follows:—Fanyiquara, Fandikér, Falibék, Vórolo, Takalla, Bongo, the last being inhabited by Shúli. Next to the river lie Yodzi, Dana, Pámeto, Ibi, and Bári. From an ant-hill in the fields Jebel Labilla (Abu Sala) was indistinctly seen to the south-east, and the mountains of Obbo to the north-north-east. Drinking-water is obtained here from wells, the nearest *khor* being at some distance. Extensive fields of sesame, eleusine, and hibiscus were succeeded by open forest, while mountain groups still appeared to the left, in the front of the road. Khor Iti was next reached; it is rather narrow, but carries down a rapid torrent of water to the larger Khor Atappi. Its upper course was marked for a short distance on our left by a row of trees. We turned away from it, and then passed between high hills, having on our left the isolated hill of Itiagó, and on our right the long ridge of Lofurri. The path was overgrown by wild grass and isolated clumps of bamboo. Taking a south-westerly direction, we marched through well-cultivated fields containing ornamental groups of beautiful trees. The pretty *Pogonorhynchus Rolleti* and, in the corn-fields, the harlequin quail (*Coturnix Delegorguei*) were frequently met with.

This district is called Bári. Upon a height above Khor Iti lies the large village of Anyisori, in the midst of garden-like surroundings, its numerous homesteads covering the country far and wide. A striking contrast was presented by the desolate hilly country, overgrown with high grass and dense brushwood, which we entered, after a short rest in the village. Here troops of elephants were busy gathering *mabbak* (the fruit of the Zizyphus). A very difficult road through briars and grass, with ridges of granite running across it, brought us at last to the large Khor Atappi, which we forded with ease, as it had not rained for a long time. It is a fine channel, about sixty feet broad and five feet deep, and above the ferry it flows with a strong current almost due west. Dense forest and bushes of Zizygium adorned the high banks; granite blocks, felspar, and

mica were visible here and there. Numerous butterflies flew out of the trees, and we very frequently heard the *Schizœrhis zonura*. The road again ascended, and the mountain of Dōmi became our landmark. The country before us was entirely uninhabited, but, on that account, the more frequented by herds of elephants and buffaloes, and the presence of still more dangerous company was indicated by the numerous spoors of lions on our path. Shortly after noon our road approached Mount Dōmi, but as it soon took a more easterly direction, the mountain was left on our right. Our path afforded us an occasional glimpse of the mountain peaks on the west of the Nile. We reached at last the Mádi settlement, Agudze, where a part of the population of Farshile has established itself in three strong *zerîbas*. A heavy storm broke over us here.

As we were informed late in the evening that guides were awaiting us at a village lying a little farther to the south, we marched to that place next morning. The road took us down-hill and across Khor Kulukëu, on the banks of which were scattered numerous boulders, but we could not find a drop of water. After another steep descent, we gained Khor Asua, but soon left its sandy bed on our right. There seemed to be very little water; broad sandbanks and numerous granite boulders were visible. From this point the *khor* flows past Jebel Dōmi, which lies on its right bank, and it receives the waters of the Atappi before it enters the Nile. Linant's route lies farther to the west. The village of Odiri, to which we were bound, was recognisable at some distance, from a pile of rocks and a magnificent tamarind. Millions of green hairy caterpillars unfortunately rendered the shade of the trees uncomfortable. In order to reach Khor Asua, we had now to return along the old road, and then to turn a little more to the west, when we soon arrived at the bed of the river, which is here exactly eighty-eight feet broad and three feet deep. It had not rained for a long time; in fact, very little rain has fallen during the *kharîf* this year, which may account for the river looking so insignificant. Banks of yellow coarse quartz sand bordered the stream in places, and large boulders were still more frequent. The banks were six to eight feet

high; they sloped down gently, and were scantily clothed with vegetation.

On the left bank of the river, which here flows due north, thick smoke appeared, and as we approached I fancied that I perceived a very slight smell of sulphur. From large clefts between the boulders, and still oftener from springs close by the river, there bubbles out perfectly clear hot water, without taste or smell, at a temperature of from 137.3 to 138.3° Fahr. (at different places), forming a small brook forty-six inches broad and three inches deep. In this little channel two other springs gush forth, whirling up thick mud. By measuring with a stick, I found a rocky bottom at a depth of twelve inches. The temperature of the air was 72.5° Fahr.; that of the river water, 77° Fahr.; the aneroid read 27.69 in. A boiling-point observation, made somewhat later, resulted in 208.8° Fahr., the temperature of the air being 73.4° Fahr., and the aneroid indicating 27.69 in. No deposit of efflorescence was noticed near the springs, and no plants or animals were to be seen around, except the boiled body of an inquisitive frog. In the middle of the river, somewhat higher up, there are other warm springs, having a lower temperature, viz., 104° Fahr. The whole of the western sandbank appears to be undermined by hot springs, for a very short distance below the surface the ground becomes hot and moist. After a course of about ten feet, the little streamlet flows into the river, and makes its water warm to the touch for some distance. The whole ground must be quite under water when the river is at full flood. The water from these hot springs is credited with great healing power, especially for syphilis and skin diseases. The practice of scattering corn and flour round the springs indicates a traditional reverence for them. These springs, together with those on Jebel Labilla and that to the south of Fatíko, appear to originate in one and the same large basin. I took some of the water for analysis. I found many wing-shells in the river. Farshile lies to the south-west of this place, and may be reached in about three hours and a half.

Undulating grass land, strewn over with boulders, rose gently before us; but few trees were visible, and most of those were distorted by fire. A very lofty tree stood out upon the ridge of the hills, forming a good landmark. Jebel

Dōmi was still on our left, while to the right Khor Chuki, though a good way off, could be distinguished by the fringe of trees along its banks. We presently crossed it, and could see that the gigantic blocks bordering its bed had been sculptured by the water, and not been brought down by floods. An extensive view from the next hill gave an opportunity of taking the bearings of the previously unknown mountains and mountain groups in the Shúli district, which we were about to enter. Jebel Namo, lying in the district of Fadot, was very imposing. A rapid ascent over hilly country, overgrown with very high grass, brought us to a rivulet, where we expected to find water; but it was quite dry, and digging procured only a little coffee-brown, bad-smelling liquid. A little farther on we found a pool of rain-water, which, to judge by its colour and taste, must have been used by elephants and buffaloes for toilet purposes; but our thirst had been unquenched for six hours, in a temperature of 33° C. in the shade, so we were not very particular.

The country was entirely uninhabited, and the grass so high that it was difficult even to use the compass, especially as the path turned and twisted every moment. Where woods intervened, they were fairly uniform—acacias, Kigelias, and numbers of Sarcocephalus caught the eye, and the tamarinds were particularly fine and numerous. As a rule, the country from Ladó to beyond 3° N. lat. presents the same grey monotonous green, the same stiff leather-like foliage, interrupted only at the *khors* by a more succulent verdure and some variety of species. Towards the south the vegetation assumes a different and more cheerful character. As regards the animals of this region, lions, leopards, and hyænas alarmed us every night, and the cheetah is particularly common. Buffaloes, elephants, and various kinds of antelopes (the commonest being *Antilope oreas*) abound. On account of the high grass, we could only *hear* the birds. A large species of python is frequently met with at the *khors*.

During a slight thundershower, we reached the Shúli village of Fanto, and were soon busily engaged in building our huts. Taught by experience, I have long since discarded the inconvenient practice of carrying a tent about with me; every wood

furnishes abundance of long switches and branches, which, driven into the ground in a circle, are arched over and bound together with bast; thus a framework is formed resembling a hencoop, and is strengthened by hoops or switches tied round it, and thatched with grass held in place by strips of bast and thin switches. A shelter is thus formed which is large enough to contain an *ankareb*, a few boxes, a table, and a chair, and which resists the rain and storm better than a tent. One hour is quite sufficient for a few men to construct a comfortable hut.

The village of Fanto is inhabited by Shúli, but the huts are like those of the Mádi, and do not resemble the Shúli dwellings farther north, which are built like Shíluk huts. Each hut has a small, carefully fenced tobacco plantation (*Nicotiana rustica*), beside which lie heaps of ashes for strewing over the plants and the soil, as a protection against insects. Small calabashes are grown, and *Helmia bulbifera*, which, however, is more common in the Mádi than in the Shúli districts. Only the round subterranean bulbs are eaten, and when I gathered some of the aerial bulbs I was strongly urged to leave them alone, the men saying that they would kill me. Red durrah, sesame, eleusine, and a little *dukhn* (*Penicillaria*) are the chief articles of food; but throughout the Shúli country eleusine corn is preferred for eating, while red durrah is used for brewing, and eaten only in times of need. Whenever the eleusine crop fails, as it partially did this year, the people everywhere complain of hunger, although there is abundance of red durrah. Besides these cereals, there are numerous plants of which the seeds or leaves are eaten as vegetables. Two sorts of cucumber, two of hibiscus, one of them (*Hibiscus cannabina*) used for making packthread, the other grown for its seeds, and a species of Echinops, from which salt is made, are cultivated everywhere. Each hut contains large water-jars and small cooking vessels of clay, of the usual shapes. Here, as elsewhere, the pottery is made by women, and it is only south of 2° N. lat. that this work devolves upon the men. Every woman lives with her children in a hut of her own, and has her own granary. In front of each dwelling there usually stands a miniature hut, containing some corn, small bones, &c., and near it a kind of miniature sleeping-bench is placed, and is looked upon as a

prophylactic for all sorts of skin disease. I did not see any domestic animals, but the huts in the Shúli and in some parts of the Mádi district are infested with bugs.

The clear weather that followed the storm enabled us to get a good view of the Latúka range, which is quite Alpine in character, and contains elevations rising probably to 4000 feet. The Shúli call the whole chain "Ablenyim," from *nyim*, sesame, and *ablé*, wanting, because the inhabitants possess very little sesame, and obtain their supplies from the Shúli country. Besides this nickname, each portion of the long chain has probably a name of its own.

The road from Fanto wound in a long curve, skirting the mountain group of Adodi and leading through several clearings, which, to judge from the presence of some straggling durrah and sesame plants, must have been at one time under cultivation. We then ascended, between parallel ranges of hills, to the prettily situated village of Laguerion, which name has quite a French sound, owing to the nasal pronunciation of the *on*. The village of Yuaïa, where our Mádi porters turned back and were replaced by Shúli, belongs to the district of Farajók. Obbo lies to the north of this place, Labongo to the south, Fallibék to the south-west, Fadibék to the south-east, and Mádi to the east-south-east. The station of Fadibék stands on Mount Latjiet, which is distinguished by its double peak, and lies almost due south-east. The chief of the little village kindly presented me with three baskets of flour, and expressed his devotion to me by lifting my hands alternately, then turning them round, licking the palms and wiping them with his hand, while all the time his face wore an expression of the greatest delight. The frisures and ornaments of the people correspond exactly to the description I gave previously. Every one has his under-lip pierced, and wears in it polished quartz pins, brass cylinders, or straws.

Fortunately, little dew fell at night, so that the porters were more willing to start early, as they had not the prospect of a cold bath. Khor Limúr, which we reached after a very tiring march through thickets of reeds and rushes, possesses good pure water, a pleasant contrast to that which we had been drinking for two days, which was a thin solution of dirt and

mud. Passing through a broad defile, a beautiful landscape opened out before us. Fresh green fields, with here and there a few majestic trees, were bordered with hills, on the tops of which were bare piles of stones, forming fantastic outlines against the clear sky. Such a scene amply compensates for many difficulties. From a high hill, the burnt rock of which looked like cast-iron, we obtained another good view over the long Latúka range, which runs up from the north, and which is called here by the general name of Lumoga (the *g* is pronounced like the Arabic *ghain*).

We next marched through exceptionally high grass (this country ranks after north Unyóro for the abundance of its grass and thorns), the pointed beards of which penetrated our clothes and pricked like needles. The village of Mádi, in the district of the same name, is fenced in by split bamboo, as is the case in all the succeeding villages to the south-east, passion-flowers and Cucurbitaceæ twining their tendrils over the fence. The bamboos from the immediate neighbourhood are also used as fuel, wood being scarce. Towards the south some slender doléb palms were visible, and Amomums were plentiful at the *khor*, but unfortunately the fruit was not ripe. The inhabitants appear to be keen hunters; netted hoops were hung before the huts for catching francolins and bustards, which are said to be plentiful. If a bird steps into the hoop and gets caught in the network, it cannot escape. Snares for antelopes are constructed on the same principle, like those seen in Ugánda and Unyóro.

The porters engaged for the next march assembled at midnight and held a veritable dancing orgie in the bright moonlight, accompanied by all sorts of conceivable and inconceivable noises. Towards morning, however, they fortunately went to sleep, having realised with horror that they were expected to start early, in the cold (64° Fahr.), and to march through the wet grass. Thus it was late when we left Mádi, and after marching through its extensive fields, we came to another little village, where all the trees were hung over with straw beehives, showing that we had now reached a honey-producing district. While a great deal of honey is obtained in Makraká, its quality, however, being rather deteriorated by the method

of extraction by fire, the Bari country produces no honey at all, and the eastern part of the Mádi country but little. On the other hand, the whole of the Shúli country abounds in good white honey, owing to the practice of hanging the bee-hives upon the trees. In Unyóro, where cylinders of bark are used instead of baskets, the honey is also good, and has a fine aromatic flavour; perhaps the elevation of the country has some effect upon it.

The rest of the way to Fadibék was rather picturesque; cultivated fields alternated with thin acacia woods, scattered boulders and small swampy channels bordered by rank vegetation, until we reached a high towering rock, against which was situated the village of Agoro, surrounded by luxuriant crops and girt with dark masses of foliage. The Shúli usually choose picturesque sites for their villages. A short descent brought us to the station of Fadibék, which is built here upon a low hill.

The Government formerly possessed here a flourishing, well-situated, and healthy station (Fadibék is more than 3000 feet high), but when Gordon Pasha, from motives of economy, gave orders for the evacuation of all the southern stations, this also had to be abandoned, although its revenue in ivory far surpassed the yearly expenses. Since that time, the chief, Aguók, repeatedly requested that a station occupied by regular soldiers might be erected near him, and had brought ivory to Fatíko as a present. His wishes were readily complied with, for the new Governor-General has no objection to the erection of stations, provided they cover their expenses, and this new station is prospering very well, on account of the active assistance of the Negroes, and promises to become one of the finest in our province.

We failed to procure guides here to Agaru, which lies about a day and a half's march to the north-east, owing to the aversion of the people to the inhabitants of that country, where a small station is about to be built for the collection of produce from Irenga and Turkan. The road to the south-east passes through Labongo, Fallibék, and Fajulli to Fatánga, near Jebel Lira, where another station is in course of erection, with the object of opening up the Lango districts. Unfortu-

nately, the season of the year rendered this direct road to Fauvera impracticable, and, much against my inclination, I was compelled to go by way of Fatiko. The route from here to Dufilé was said to lie in a westerly direction, but no one had travelled by it. Khor Asua, which lies at some distance from here, is crossed, they say, in going to Fatíko.

Chief Aguók has become a thorough Dongolaui in dress and manner, speaks Arabic fairly, sits and sleeps on an *ankareb*, and regales his guests with coffee, but nevertheless his numerous wives and children appeared in the national costume, *i.e.*, almost nude, adorned only with short tails of cotton. The Shúli have a greater liking for glass beads than any other tribe of this country; small crimson and white opal beads are particularly prized. The men plait cowrie-shells and beads in their hair, but their tresses are not so elaborately arranged as among the Shúli living farther to the south and east. Iron ornaments are everywhere the order of the day, and the gorgets, which actually cause the neck muscles underneath to shrink, and bracelets and anklets, as well as chains and ornaments for the girdles, are very neatly made. A Shúli smith was working close to the chief's premises. His bellows were formed of large clay vessels, having, at their bases, spouts drawn out at right angles to carry the blast; they were covered at the top with leather, having rods fastened in the middle, which are worked up and down to cause the draught, and are kept in action by a boy. Large stones serve as anvil and hammer; the tongs are made of a piece of wood, split at the end, and a piece of iron to polish the work completes the apparatus. Fining the iron is never practised. At the time of our visit bits were being made for donkeys, which are numerous.

The men are clothed in skins of antelopes, goats, and sheep, and skins of the cheetah (*Cynailurus guttatus*) are also much worn. If a rag of cloth can be procured, it is worn somehow, the head being covered first. Ostrich feathers are much admired, and are worn as head ornaments, the white feathers being dyed red with iron ochre. The ostrich is said to abound throughout the Lángo country.

Girls go about quite nude, and the women's dress consists only of a tail of cotton threads, twelve inches long, hanging

behind from the girdle, and a covering of cotton threads, about three fingers broad, in front. Girls wear only five or six threads, hanging down in front from the girdle. Iron and brass rings are worn wherever it is possible to put them, and their jingling noise is heard at a distance, announcing the approach of one of the fair sex. The Shúli women are not ugly when young, and really pretty faces are often seen among them, but their reputation is none of the best, and it is said that their husbands are not very sensitive about the vagaries of their better-halves. I have formerly described the sleeping-huts where boys and girls learn Shúli morality.

In all the villages there are places of assembly for men and women, *i.e.*, sloping benches made of logs, on which they stretch themselves to smoke and talk; Burton has already described them. The favourite resorts of young men are high scaffoldings like watchtowers, commanding an extensive outlook. Miniature huts, magic plants for use in hunting and war, trees decked with skulls and bones, are met with everywhere.

The station of Fadibék is surrounded by numerous Shúli hamlets, all neatly enclosed in bamboo fences; their well-tilled fields extend far around, and through them winds a little *khor* with such luxuriant vegetation, that for the moment you forget that this is the sparsely wooded Shúli country. Clumps of slender date-palms, half buried in thick underwood, look very graceful. The chief of all the Shúli, Rochâma, an old gentleman who is very proud of his pure Wawitu descent, and with whom I was previously acquainted, sent his son to invite me to visit him, as illness prevented him coming to see me; so we turned off in the direction of his residence.

Broad ridges of hills strewn with rocks and boulders, and clothed with open forest, stretched out before us, and numerous hamlets lay scattered over the well-tilled country. A good view was obtained from a high bare dome, Abayo, against which the village Lungudi nestles, and as we had to change porters here, I had time to look round. The bare granite was so steep that I could hardly get a foothold. There must be a splendid view from the top (260 feet above the village) in clear weather, but on this occasion smoke and fog interfered

with it. Far to the south-east lay mountain groups, one of which, Farabongo, I was told, could be reached in four days' march. Jebel Shua was fairly distinct, but Jebel Julu and Jebel Kija were veiled in mist. I saw an incredible number of large leaf-bugs filling all the recesses of the rock and emitting a disgusting odour. Some of the porters assigned to us here had full beards, though as a rule one never sees bearded Negroes in this part of the country. Large quantities of sesame were under cultivation along our route. Passing the large hamlet of Kyatangura, we entered the district of Labongo. We had met with this name before in the Lúr district; the recurrence of it here among the Shúli, whose close affinity to the Lúr is sufficiently proved by their language, is very striking. A good deal of confusion may, however, arise from the fact that here, as in Makraká, whenever the soil is exhausted, the villages are removed, and their names disappear with them. Hence it is very necessary, for the benefit of future travellers, to give correct names to the *khors* and mountains, the unchangeable features of the country. We had still to pass several widespreading hamlets before reaching our night's quarters, situated beside a pool which contains rain-water all the year, and which, like the village, is named Diendi. At every hamlet we passed, the chief came to greet me, generally dressed in a long coloured shirt and a *tarbush*, and accompanied by a motley crowd of men and women. The Shúli are a very polite people, always ready with greetings and inquiries after one's health, but as their national greeting consists of raising the arms of the visitor four or five times above his head, the repetition of the ceremony becomes rather fatiguing.

Our next marches, though not unreasonably long, taxed every one's strength severely, on account of the high grass. Unless the nature of the country, its inhabitants, or other pressing reasons, render it absolutely necessary, I always consider it foolish to make porters with whom one is going to travel long distances march more than six hours a day. On the road from Diendi to Khor Bagger, the most important tributary of the Asua after the Atappi, the grass and its accompanying inconveniences surpassed anything I had seen before.

A storm during the night had beaten down the long grass stalks and quite concealed the path. We had therefore to fight our way through damp bogs, enormous grasses, and thickets of bamboo, no pleasant combination. We breathed freely again at last, when, after more than three hours' struggle, we reached the stony ridge along which lies the village of Latjiet, amidst picturesque rocks. After crossing a range of hills, the highest of which was the cone-shaped Nyone, we left the district of Labongo and soon arrived at Khor Bagger. Its rapid torrent was confined by banks, some ten feet high, on which flood-marks six feet above the present level were plainly visible; the water reached up to our waists and roared over numerous boulders. At the ford, the bed of the *khor*, which elsewhere is fifty to sixty feet broad, widens out considerably, and is divided by boulders into deep channels. The force of the current presses upon the southern bank, along which loam-pillars, about eight feet in diameter and overgrown with rushes, rise above the level of the river. These are fragments of that part of the bank which has been torn away by its current. Unlike all the streams we had hitherto passed, which were of a muddy yellow colour, the water in Khor Bagger was very clear and good. Its source is said to lie in Lirēm, a district of the Lángo country.

After a short rest on the southern bank, the march was continued. Jebel Goma stood as a landmark before us. The real dip of the country begins at the ridge on which the village of Layima stands; the ranges of high hills which we had successively passed during the previous days lay behind us, shutting out the horizon like a wall. A boiling-point observation (207.1° Fahr., temp. 84° C.) confirmed the fact that we were descending. In the open forest covering the slope, we heard the call of numerous francolins at daybreak, and a very singular cry seemed to announce the presence of *Ptilopachys ventralis*. The *Colobus guereza*, which are very common from here to the south and towards Abyssinia, were combing their white coats upon the tall trees. On reaching the village of Biayo, Rochâma's residence, we found that he had thoughtfully had good huts erected for us; but the old gentleman was very indignant when he heard that I intended to cross Khor Asua

the same day. When, after a long debate, in which even his wives took part, and after an appeal to me to stay for old acquaintance' sake, I at last yielded to his importunity, his men were immediately ordered to bring wood and water, a goat for myself, and several pots of *mrisa* for my men. A present of cloths, glass beads, copper, and a bottle of wine for himself, requited his kindness and increased his good-humour. Rochâma had aged, but was still the faithful, amiable man I had previously found him to be. He has no power at all over his people, who make fun of the long-winded orations he is so fond of making on every possible occasion. His son is very young, and cannot support his authority, but this is certainly done by his first, old, and ugly wife, who is only distinguished from her inferiors by a rather longer tail; she was very obliging.

The village is beautifully situated. A fine *khor*, fringed with beautiful vegetation, flows along the bottom of a wide clearing, which is covered with short succulent grass, and resembles a meadow. It is adorned with handsome colossal fig-trees, tamarinds, and dolébs. Close beside the village, which nestles among crags, there is a rocky ridge, upon which I found a plant quite new to me. I am inclined to call it a reed palm; it is named here *Lakorta*, and is said to be confined to this mountain. I had never seen it before in any of my long expeditions, and of course I collected specimens. Bananas are scarce; evidently the soft yellow loamy soil does not suit them.

A concourse of people had gradually assembled; their appearance was very striking, on account of the curious way in which their bodies were painted; purple spots in front of the ears and an ashy-grey ring round each eye seemed to be the favourite design. I noticed several zebra-hides among those worn as clothing by the men, and I elicited that the animal was very common towards the east, and especially in the open sandy Lángo district. A very old and defective zebra-skin was worn by one of the boys. Its very narrow dark stripes on a pale yellow foundation seemed to indicate a particular variety, but perhaps it was only the skin of a young animal.

Great men do not make great haste, so we could not set off

next morning until friend Rochâma had finished his sleep, and, with great difficulty and trouble, had persuaded his men to carry our few loads. In the course of the march, which took us over very hilly ground covered with high grass, Jebel Ató, better known under the name of the district, Faranka, came into sight. I noticed some Eriodendrons growing in a wood, but they seemed to be very scarce here. A very steep and long descent brought us at length to Khor Asua, which is here widened by broad stone ledges to about one hundred and thirty feet, and was very difficult to ford, especially as the late rains had swollen it considerably, so that the water reached to our armpits. Rich vegetation crowned the rocky banks, the bright blossoms of the Spathodeas shone among the dark foliage of the tree-tops, and red Loranthus twined its garlands round the trunks. Exactly opposite the point where we descended to the ford, Khor Bara, which we had crossed once before near Bayira, and found rather empty, poured its abundant water into the Asua. The village of Lenga-Lenga, which we reached after a short march through open forest, stood on a corner of a rocky height without any fence. Besides bananas, tomatoes are found here, which were no doubt introduced by the Danagla.

Village now succeeded village; but the large hamlet Uóng, on the gentle slope of a green hill, surrounded by fine clumps of trees, and having a fine view of the mountains of Fatíko, was particularly attractive. As soon as we had crossed Khor Bara, we entered a palm forest, in which were situated numerous *zeríbas*, fields, and hamlets, upon a comparatively level highland. The village of Odiák, where Chief Rochâma had again thoughtfully had huts erected for us, lay within sight of Bayira, which we had visited before. The adjacent large fields were planted with sweet potatoes of the red-skinned variety which are universally grown in the south, while in all the districts to the west of the Nile the larger less sweet and white-skinned kind is cultivated. The chief of this place kindly had a feast prepared for my men in the evening; large quantities of eleusine beer and sweet potatoes were supplied by the villagers, who, in return, claimed a share of the men's rations of meat, and dancing and singing kept the village astir until the early morning.

The march from here to Fatíko was very pleasant; a short descent over very muddy, pitchy black ground brought us to Khor Bara, which we again crossed. Its bed was crowded with rocks, and its water was about ten feet broad, and not quite five feet deep. In the open well-tilled country were several little hamlets, and close to the road lay Verbayo, within a stout stockade of wood; a good many Tephrosia were growing beside its houses, and the indigenous Luffa cucumber and small calabashes climbed up them. The short grass looked at a distance as if covered with hoar-frost, an illusion produced by the dew-drops hanging on its reddish flowers. Accustomed as we were to a constant temperature of over 68° Fahr., we felt it quite cold here at 63° Fahr. There was an almost entire absence of trees, as yearly fires only permitted the growth of annuals. The village of Otóngole had been deserted, as the soil was exhausted. Its site was marked by bananas, gourds, and tobacco plants. The last part of our march was through high grass, with occasional rushes and Cyperaceæ, sparse woods, red sandy soil, and stubble-fields, where grasshoppers were chirping. The road rose gently all the way, and brought us, at the end of three hours, to the station of Fatíko, where we were to stay several days.

5. From Fatíko to Fauvera and Back.

SCARCITY OF FORESTS IN THE SHÚLI COUNTRY—A PAPYRUS SWAMP—A FIGHT BETWEEN HYÆNAS AND LIONS—A TROPICAL FOREST—RECEPTION BY RIÓNGA — FAUVERA — PEDIGREE OF THE WAWITU PRINCES—A NOCTURNAL FEAST—SORCERESSES—PRODUCTS OF THE SOIL—MEAT—A STRUGGLE THROUGH GRASS.

When we despatched our men to reoccupy Fauvera and keep the road to Ugánda open, the officers in charge found the old path so full of grass and briers that they preferred to follow the beaten track running from here to Koki, and from that place to try and discover the road used years ago by the Danagla. So too we, leaving on our right the road we had followed before, turned straight towards Jebel Ató, which

could be used for a long time as a fixed mark in the construction of our route.

The descent from the plateau on which Fatíko stands is noticeable at once, although the country seems to rise to the south in parallel chains of hills. Muddy channels, reminding one of those in Ugánda by their blackness, though not by their depth, run between the rows of hills, and blocks of conglomerate are scattered on the ridges. Here and there is a little brushwood, and, wherever a few trees form a clump, there are whole nests of Amomum, the agreeable, sourish pulp of which is much relished by everybody. The Arabic name used here for Amomum is *Abu Hamira;* in Unyóro and Ugánda, where the plant is called *Matúnguru*, the fruit is eaten with banana beer (*mwénge*).

A short distance before Kanakók we had to cross Khor Bara again. Scattered *zeríbas* full of huts, from which the sound of merry singing reached our ears, form, together with the village, the district of Loggolum, which is rich in corn and sesame. Throughout the Shúli country, though plenty of red durrah and Penicillaria are grown, eleusine is the more important grain, because it alone produces a strong, bitter drink (called *kongo* by the Shúli), for here too drinking very often takes the place of eating. I have seldom met with so numerous and inquisitive a company as at this place—women, children, and men, a motley crowd, with their glittering iron, brass, and copper ornaments, many of the women carrying their infants on their backs tied up in goat-skins and covered with gourd-shells.

The undulations of the country before us were so considerable that even the mountains of Fatíko were hidden from view. I succeeded, however, in taking, from the top of an ant-hill, the bearings of Mounts Goma, Kaka, and Kalavinya, which crossed my former bearings. A very long march took us from Kanakók to Koki. The hills, which run parallel to the road and shut it in to the right, *i.e.*, the west, form the watershed between the Unyama and the Asua, and therefore all the streams we crossed that day ran to the left, that is, eastwards to the Asua, while along our former route all the *khors* flowed to the Unyama, the main stream of which we crossed near Fatíko. The humidity of the soil in this tract

of country is very considerable, as shown by the pitchy black patches of swamp. The numerous rivulets, some of which, like Khor Malach, contain very good water, are generally fringed and almost filled with granite boulders. The ground, which in the lowest places is a rich, black, and very heavy humus, is replaced by clay and quartz sand upon the ridges of the hills. The mountains visible here were Jebel Ató, lying just in front of us, and Jebel Moró, a group situated far off, in the Lángo district, and not yet marked in any map.

On the whole the vegetation is poor. Woods are very scarce in the Shúli country, but abundance of high grass is met with, and this uniform covering often gives the country the appearance of a large savannah, although it is really undulating and hilly. It is difficult to gain much knowledge about the animal world during our journeys in single file, even when one is at the head of the procession, for the rustling and crackling of the trampled grass through which a way must be made scares all the animals away. We saw, however, many elephants. The village of Koki, temporarily deserted by its inhabitants, is beautifully situated, and still more beautifully cultivated. Tobacco, sesame, eleusine, bananas, and even cotton, are grown. Our night quarters lay away from the road, at a place called Koro, which was exceedingly dirty. Besides the white-blossomed Tephrosia, I saw here a yellow-blossomed variety. Our next march was exceedingly monotonous, and led through slightly undulating country, which looked like a sea of grass, interrupted only by patches of bog and mud; there were no fields, no villages, and no inhabitants. We reached Khor Mennabór, the first and most northerly papyrus swamp along this route. The incidents of African travel must be experienced to be appreciated—to jump from one plant to another, to miss one's footing and fall up to the breast into water and mud, to feel the burning sensation caused by the fine hairs of Vossia grass, which abounds in such marshy spots, and above all, to witness the absurd appearance presented by a whole company of people kicking about in swamp and mud, all these things are very curious. We met a caravan of Wanyóro who had been buying ivory from the Shúli in exchange for brass and bark cloths, and who were probably going to exchange them

in Ugánda or in Kabréga's country for women, cattle, and brass.

Soon after this we came to Khor Tochi (Khor Tushe of Linant's map), and encamped on its western bank. We were now in the basin of the large Khor Kabuli, which is formed by the union of the Tochi and the Kórova, and joins the Nile opposite Fauvera. Khor Tochi was at this place about forty feet broad; the water reached to our knees, and had a very rapid current; we had crossed it before nearer its source, where it is known as Khor-el-Hamir (a name given it by the Danagla). Khor Shagga joins it above the spot we forded this time. Lions and hyænas are very numerous, and here, as all over our country, there is a firmly rooted belief that a deadly enmity exists between the two animals, and that when hyænas conspire together against lions they always get the best of it.

From a lofty mass of rock, which we reached about an hour after leaving our camping-ground, we obtained a distant view over almost level wooded country, in which the mountains of Moró, Pidi, and Fatiri were visible. The aneroid reading gave the elevation of the country as rather more than that of Fatíko. During the day's march we crossed broad depressions lying between hardly perceptible ridges of ground; in the rainy season they are probably almost impassable. Khor Póroli is another, and a very bad, specimen of the papyrus swamps alluded to above; it is very deep; *Ampullaria Wernei* was growing here in great abundance. We took more than half an hour to cross the swamp, which was about seventy feet broad. To the left, and marked by an immense Vitex-tree, lay the road followed by Baker on his first journey to the south. Not far from the swamp is Khor Kórova, the largest stream of this region, which, with Khor Tochi, forms the Kabuli. Coming from the Silicat (? Shikat), it is here about a hundred feet broad, and its yellow, icy-cold water is breast-high. At the ford it is skirted with papyrus, but the passage is quite open, and the sandy ground gives a good foothold. For more than a quarter of an hour the *khor* was on our left, looking like a broad strip of papyrus; then the road turned away from it up the slopes of the hills, from which we saw undulating woody country to the south. Wild boars are very numerous in this district.

After a long walk through high grass we reached, at Ras-el-Fil, the road we had previously traversed; here were some pools of water, being all that was left of Khor Lio, which is said to flow into the larger Khor Tabaru during the rainy season; the latter, in its turn, pours itself into the Nile near Anfína's island. Francolins abound here. After a long search, we at last discovered some dark stagnant water in a hollow, and by it we encamped, after a march of seven hours and a half. The place is called by the natives Modo, but by the soldiers Ras-el-Maye, because pools of water are said to exist here all the year. The formation of the ground we next passed over was remarkable. Probably there was once an even slope down to the river, but the upper layer has been washed away, and where harder ground has resisted the action of water long ridges remain standing. Their elevation above the level of the country is insignificant, but, following their direction, a number of broad furrows or depressions have been formed, generally containing mud, water, and rank vegetation.

As the road runs, as a rule, along the top of the ridges, and therefore parallel to these depressions, the general effect is the same as when passing between rows of low hills. The country sinks towards the river. There was no scenery to speak of; high grass and woods alone were visible. After passing the point where the road to Anfína's branches off, we again left the "old road," and, instead of turning towards Khor Kabuli, we took a more southerly direction, passed a Shifalú village hidden in forest, and were informed by the cry of *Haliaëtus vocifer* that the Nile was near. This bird and *Lobivanellus senegalensis* can be heard at a considerable distance, and their cry is a sure sign of the proximity of water. A quarter of an hour later, the river, divided by large rush islands, lay on our right, and, shortly after, we reached Khor Kabuli and the hill which marks its confluence with the Nile. The former landing-place at the *khor* was entirely overgrown with rushes and papyrus, so that the water was quite hidden. The river has here also a broad fringe of papyrus, through which boats are pushed with difficulty, and the landing-place at Fauvera alone is free from this obstruction. Fauvera, which we soon reached, was in process of renovation. It was among the stations abandoned last

year, and the men told off to reoccupy it had only been there fourteen days. On the north bank of the river there are several large villages, inhabited by Shifalú, and indeed the whole district near the rapids is named, both by the Shúli and the Wanyóro, Shifalú, but by the Wagánda, Chopi.

Riónga, the chief of this district, was little altered, but was perhaps rather more stupid than he used to be, owing to his indulgence in *mwénge* and spirits. Fauvera is well situated, and surrounded by fine large forests. It possesses a heavy, grey, loamy soil, which produces good crops, especially of maize. The river yields abundance of fish, of the species common in these countries, but a longer stay might reveal many new kinds. A kind of python is very frequently found on the river-bank just below the station, which lies about twenty feet above the level of the water. Specimens eight to ten feet long are often killed, and are freely eaten, while the fat is considered a specific for rheumatism and for earache. Hyænas and leopards are nightly guests, and are very troublesome. Birds are seen in large numbers.

The road from Fauvera to Koch is rendered very interesting by its beautiful scenery. Clumps of tall trees, generally tamarinds or sycamores, festooned with luxuriant climbing plants, alternate with open acacia wood (*Acacia gummifera*, *A. campylacantha*, *A. albida*, *A. fistula*); but euphorbias, doléb and date palms, and the slender Dracænas, with their leafy crowns, are especially striking. Their presence imparts to the forest a genuinely tropical appearance, which is increased by the abundance and beauty of the underwood, and contrasts very strikingly with the tediously uniform woods on the northern bank.

Koch (Koki), which is perhaps the best-situated station of the province, will scarcely be tenable, for Riónga is by no means to be depended on, and lately has been actually refractory. The Nile here flows almost due south and north, and the left bank is free from all obstruction, but the papyrus fringing the opposite bank is all the more luxuriant, and Riónga's island, Nyamezi, which lies just opposite the station, is completely covered by it. Of course, mosquitos are not absent, either here or in Fauvera.

The river (Nile) appears to have no general name among

the natives, but is called after the different districts through which it passes. At Koch I sometimes heard it called Kyambo, although its usual name in Kinyóro is Muigga. The name Kióga is applied only to the lake-like enlargement of the river-bed above Mrūli, having no outlet to the north, which is marked on Gordon's map Lake Coja, and has been repeatedly "discovered." The name Kikúnguru is only used for the district, and the mountains marked by that name on the maps have no general name; their highest elevation is called *Msédya* (man), just as in Kabréga's country a high conical summit to the east-south-east is called *Msédja mkurru* (the tall man).

Slightly ascending, our path wound from here to Gásaui through fine acacia forest, containing numerous hamlets and extensive plantations of sweet potatoes, pulse, and tobacco, besides small groups of bananas. But from Gásaui a stretch of grass and reed-beds commenced which defies all description. The banana groves run wild, with their fallen stems, and an undergrowth of briers and tendrils which grow with almost incredible luxuriance in the loose coffee-brown soil, are, in spite of their thorns and prickles, not so unpleasant as the thick, dense beds of reeds, which, rebounding, strike and lash the traveller from all sides. A few solitary huts were all that remained of the once flourishing village of Karsita. Deáng Malo (Malo), where we remained for the night (making, in the Wanyóro fashion, only short marches from beer jug to beer jug), is a small village, inhabited by smiths, who work the good iron ore found in the neighbourhood. The whole district from Tokra is called Deáng, which name, therefore, is not confined to a particular village, as I had before understood. My men revelled here in maize cobs and sweet potatoes, of which our host provided quantities in return for a small present. We next met with broad hollows, fringed here and there with woods and filled with almost impenetrable reed jungle. Large groves of bananas, in which hundreds of trunks had been broken down, probably by elephants, were rendered almost impassable by plants growing in dense confusion between the fallen stems. Any one who wishes to gain an idea of the gorgeousness of African vegetation should visit one of these places, though he will certainly congratulate himself if he gets out of the chaos

of prostrate trunks, deep holes and trenches, creeping plants, thorns, and tendrils, with a whole skin and only his clothes in rags. But yet these woods are beautiful. After passing the little village Bedmot, and the Maya ravine, we left the huts of Kijaja to our left, and, marching along a much better road, we reached the boundary between Riónga's and Anfīna's territories, at the Khor Nyaj, which was quite dry. We rested at Royoro's village, Merachák, and through the liberality of that chief, who is subject to Anfīna, my men enjoyed some banana beer, so that the march was continued in better spirits. The hills above Khor Tari were clothed with a grand wood, whose trees towered to the sky and were hung with festoons of climbing plants. Many trees upon our way had been stripped of their bark to make beehives, though the management of bees, if such a term may be applied to the mere hanging up of hives and the extraction of the honey, is much more actively carried on in the Lángo district than here.

On our arrival at Anfīna's (Panyatoli), his men, in festive attire, and drawn up in rank under waving Egyptian banners, received us with a volley of guns. Anfīna himself, their commander, was dressed in English flannel, and did me the honour of conducting me into his enclosure, where a fine large hut, built in the Wagánda style, was assigned to me, while my men camped outside the fence. Presents were immediately brought me of quantities of sweet potatoes, fowls, eggs, eleusine, flour ripe and unripe bananas, six elephant's tusks, and a goat. A cow and the indispensable banana beer were added for my men. I was not a little puzzled as to how I should requite this bounty, for among the great chiefs of the south one cannot get off with glass beads and other toys of the kind; at any rate my present must have pleased Anfīna, for a large gourd vessel full of banana wine (*sandi*) was then sent me. The reception prepared for me, the crowds of people, the well-armed attendants of the chief, becomingly dressed in cloths, the people decently wrapped in skins and bark cloths, all vividly reminded me of Ugánda and the reception I met with on two occasions from King Mtésa. I must say again, that, setting aside peculiarities common to all Negroes, Anfīna and Mtésa's Katikiro

(Pokino) must be placed among the few Negro gentlemen of my acquaintance.

As is well known, Anfīna is one of those rulers in the south who trace their descent to the Wawitu, and are rather proud of it, and of their lighter-coloured skin. Suwarora, Mtésa, Rumanika, Kabréga, Riónga, Anfīna, Gabla in Btenga, and Rochāma are the principal of these chiefs, and they affirm that they are related to one another. Without entering into this question, I will only remark that my very able and unfortunate predecessor, Linant de Bellefonds, tried to sketch a sort of genealogical tree, which, however, requires some alterations. At Gordon Pasha's request I afterwards undertook to correct it, and I give it here as follows :—

Isanza (son of Bgogó).
|
Kyevambe (named also Niantúkara).

Sággara.	Kálchope.
|	|
Riónga.	Fóvuka.
	Anfina.

Mugeni.
|
Kamrási
|
Kabréga.

Immediately after my arrival at Anfīna's, caravans of porters were sent by his sub-chiefs with presents for the support of his guests (Wawitu custom). Anfīna is the only Negro prince I have known, not excepting Mtésa, to whom clothing and whatever other appliances have found their way here have really become indispensable ; he is, also, the only chief who uses plates and dishes in eating, and glasses for drinking. *Ankarebs*, chairs, and even metal spoons are found here, and the bananas that were brought me were handed on a china dish. Evening had scarcely set in when dancing commenced ; at four different places *noggaras* (drums) were beaten, and chorus singing, with vigorous clapping, accompanied the recitative of the singer, who improvised on all possible themes. One of Riónga's men mimicked me in a very amusing fashion, inquiring the names of mountains, *khors*, plants, &c., and taking notes, not forgetting also observations with the compass. "What is the name of the village in front of us ?" asked the soloist, and gave himself the answer, "Kijaja," whereupon the chorus took up the word, and repeated ten times "Kijaja." Linant's adventures

with Kabréga's men at Khor Kāfu were also illustrated in the dances. The orgy lasted till three o'clock in the morning, and every one was stirring again at five o'clock.

The most striking figures among the crowds of people loitering about here were the Wichwézi sorceresses, a large number of whom are found at the court of every Wawitu prince. Clothed in bark cloths, yellowish brown or dyed black—one wore even the handsome *mtone*, a fine bark cloth with black patterns—so that the whole body is covered, they also not infrequently wear skins of goats or sheep, and occasionally cheetah or otter (*Lutra* sp., Nyonge) skins, and adorn or disfigure their heads with objects of every conceivable description. These ladies are certainly not beautiful, and they would hardly be eligible for vestal virgins, but they are feared, and therefore venture to take many liberties. As is always the case where professional interests are concerned, they vie with one another in eccentricities. One at Riónga's court grunted every minute; at Anfīna's, one of them spoke in the highest falsetto, while another sat down beside one of the company, and wanted her shoulders rubbed and her head bent. But there was a man who surpassed them all; he was apparently quite deaf, and chattered about all sorts of stupid things, giving no answers to questions, but leaving off as soon as any one whistled.

Panyatoli (Anfīna's village) lies in a well-wooded country, but the forest trees have been removed to make room for fig-trees used in the manufacture of cloths. The cloths I saw, however, were all coarse, and by no means equal to the fine pieces of Ugánda and Karágwa, where they are imported from Ruhánda. As regards cultivated plants, I only saw tobacco and bananas, for the eleusine was gathered in, and the time for sowing red durrah here had hardly come (November). Sesame, which ripens all the year through, is found here and there. Tobacco (*Nicotiana virginiana*) might yield a good return under proper treatment, but by careless drying, the leaves shrink up so much, that the tobacco has an uninviting appearance. The bananas are fairly good, and belong to the golden-skinned variety called *Nyamunya*. Here, as in all parts of Unyóro, the men only eat the bananas boiled before they are ripe, while the women and children also eat them uncooked when ripe.

Bananas are, of course, a very important means of subsistence, but the principal article of food in north Unyóro is the red-skinned sweet potato, which yields abundant crops at all seasons of the year. Besides the grains and fruits just enumerated, the usual vegetables are grown, such as gourds (*Helmia bulbifera*), two kinds of yams, and Colocasia. There are also a number of wild herbs, which are eaten as vegetables, and remarkably good and prolific varieties of Phaseolus, so that vegetable food is very plentiful.

The supply of meat is not so satisfactory. As a rule cattle are rare, and can hardly be taken into account except for the chiefs. Goats and sheep (the latter very large, and having large fat tails) are plentiful; goat's flesh, however, is here always better and fatter than mutton. Game can hardly be obtained during a large part of the year, owing to the high grass, but is eagerly hunted after the grass is burned down. Elephants are very numerous. As to domestic animals, there are large numbers of sporting dogs, of a good build, and generally of a brownish-yellow colour; tamed wild cats are common, but the real house-cat, introduced from the north, is rare. Fowls are exceptionally numerous, but extremely small. Fishing is actively pursued in the river; the dried, sometimes huge, fish are seen hanging up in every hut, even inland at a great distance from the river.

We should have celebrated Id-el-Kebir, the great or sacrificial festival, here, but the road to Fatíko was long and rough, and, as I had to inspect the rapids near here, where a small station was to be established to secure the passage, we were obliged to leave Anfina's sooner than he, and perhaps we ourselves, wished. Immediately after leaving Panyatoli, the descent to the river began. Well-tilled land, with numerous *zeríbas* scattered over it, by which the neatly kept road passes, gradually gave place to woods containing beautiful tall trunks, and here and there to grass land, or, where depressions occurred, to reed thickets, as at the little Khor Nyambue. After a short journey of not quite four hours, we reached the river, where the bank, about eighty feet high, sloped steeply, and was composed of ferruginous red clay. The river, flowing in a loop from east-north-east to west-south-west, has at this place (Mutuá, in the district Fodi) no rapids, and is only about five hundred feet

broad, which, of course, makes the crossing easier; but there is no village here, and only two boats are available for the passage. On the northern bank there are isolated crags and tall forests, inhabited by Lángo people, and never before visited. There seem to be no other names for the districts along the northern bank except those of villages.

Leaving the men to ship our few cattle and goats, we took our baggage and turned a little farther to the west, where there were said to be five boats. On our way we passed the spot beside the river where Linant's tent stood when he visited Anfína. The island Mukána, on which Anfína then dwelt, lies just opposite this place, but is now uninhabited, and a good deal of it has been washed away. Keeping close to the river, which is here very pretty, we reached the ferry of Aueri, and were soon busy sending off the baggage and porters. Of course, only two boats were found here, and the Matóngali who had been ordered to help us preferred drinking *mwénge* in his village, and left us to work alone. The river is not broad at this place; to our right a ledge of rock projected across it, over which the water foamed, and to our left, about five minutes off, were some rapids—none of them, however, at all dangerous. While the men were engaged in shipping the cattle, a Negro killed a fine viper, but it was, unfortunately, spoiled for preserving. We crossed in seven minutes, for our oarsmen were really good and the boat was light; we went almost straight across, though the current was very strong.

The following aneroid readings for the relative heights are of interest:—Night-quarters at Mutuá (eighty feet above the river), 26.38 in.; Aueri (seven feet above the river), 26.56 in.; level of river (in the boat), 26.75 in. The steep northern bank is richly wooded, and Lángo *zeríbas* are very numerous. We found our men waiting in the little village Mukomére, which is inhabited by Shifalú, and then we continued our journey in a north-easterly direction, intending to reach the Fatíko road at Ras-el-Fil. The country was very well peopled, to judge from the extensive fields, but the few huts that we saw had been deserted by their occupants; all the trees were hung with cylindrical hives of bark.

Towards noon we reached a rather extensive group of *zeríbas*,

one of which was kindly given up to us at once. A difficult stretch of country without water was said to lie before us. The houses of this village of Fachóra were a good deal like Wanyóro houses, divided into compartments by cane partitions, and padded with hay. But the granaries were totally different, being oven-shaped. The house utensils were of the usual description, and hunting weapons were conspicuous. The day before we arrived, a buffalo had been killed and eaten. Tobacco, Helmia (of which only the bulbs are eaten), Lubia, three kinds of gourd, sesame, maize, and Vigna were cultivated. Towards evening a large assemblage of Lángo collected; they had never seen a white man, and my leather leggings, reaching to the knee, which they called "elephant's legs," particularly interested them.

The next was indeed a march! Grass of a height and closeness rare even in Unyóro, and dripping with dew, had literally to be broken through, for, as soon as we had left the village, there was no road of any kind. As I had taken the lead, I had, of course, the first and full enjoyment of the grass, thorns, and water, and, at a temperature of 63° Fahr., to have to crawl, as wet as a drowned rat, through bushes, is unpleasant even in Central Africa. It was scarcely possible to take compass bearings, everything was so wet, and the grass thrust itself so impertinently even into our ears and eyes. The first clearing was reached after about two hours and three-quarters' march, and was hailed with joy, for we could dry ourselves there in the sun. The delay—our rate of marching could not have been more than two miles an hour—was made up for by a quick march on the better ground we had now reached, where the men ran to warm themselves, for a cool wind was blowing. At Modo, our old night quarters, which we reached shortly after midday, the water, always scanty enough, had been drunk up by elephants and buffaloes, and so we had to go on with thirst unquenched for two hours and a quarter longer to Ras-el-Fil. There we found water in a row of holes, which tasted good after a march of eight hours. From this place we returned to Fatíko by the road described above.

6. From Gondokóro to Obbo.

(Letter to Consul Hansal in Khartúm, dated Obbo, May 23, 1881.)

THE BELINIAN MOUNTAINS—ANIMAL LIFE—MUSCOVY GLASS—LOKOYA AND ITS HILLSIDE VILLAGES—LIRIA—OKKELA, A SPORTSMAN'S PARADISE—LATÚKA AND ITS PEOPLE—THE UNEXPLORED REGION TO THE EAST—PALM FORESTS—AGARU AS A HEALTH RESORT—FADIBÉK AND ITS TRADE—AN EXCURSION TO FAJULLI—LÁNGO VISITORS—OBBO—RETURN TO THE NILE.

In order to inquire into some complaints which had reached me, and at the same time to inspect our new stations to the east of the Bahr-el-Jebel, I went through Gondokóro to Tárangole, in Latúka, thence through Agaru to Fadibék and Fajulli, returning to this place by Fadibék, and I intend to go through Kérefi to Labóre, and then to the south-west.

The route from Gondokóro to the adjacent Belinian range, and thence to the Lokoya mountains, in the Liria district, was, on the whole, better dealt with in the older investigations of Morlang and Peney than on Baker's meagre map. You remember that a broad sandy plain, with open acacia woods and abundant doléb bushes, stretches out from Gondokóro towards the Belinian chain. To the north this plain slopes down to the swamps of Bor and Bēr, while to the south its margin rises up to the mountains of the Bari and Shúli countries. The region is very rich in game. Numerous herds of elephants wander over the wide plain, for they are very fond of the fruit of the Balanites, which are exceedingly common here. Unfortunately, lions are a sore plague to man and beast. The ascent begins shortly before Belinian, so that Befo's village, Urbare, though apparently in the same wide plain, is much higher than Gondokóro. The Belinian chain itself, and the country round it, are well cultivated and thickly peopled; numerous herds of cattle and goats—sheep are very rare in the Bari district—were grazing on the short green grass, accompanied by hundreds of buff-backed herons. Water is not wanting, for the Kirinion, here called Kadwë, a very important *khor*, provides water all the year, and also plenty of fish. Its

banks were literally covered with storks (*Ciconia episcopus*), which seem to make this their meeting-place; the tufted *Scopus umbretta* also is extraordinarily common. In the sandy bed of the *khor* transparent mica scales glittered. I afterwards discovered that they had been washed down from the adjacent mountains, especially Jebel Torkola, which we passed, and where we met with that variety of mica which is known as muscovy glass.

Jebel Torkola belongs to the Lokoya mountains, which, stretching from north-north-west to south-south-east, join the Shúli mountains in the south. Here, they stood like a wall before us; they have always been considered difficult to cross, because of the hostility of their dense population. Even now the inhabitants of this particular part of the Bari district are stubborn, but I have been successful in keeping the road open and preserving a good understanding with the different chiefs. From Jebel Torkola to the defile of Tollogo one mountain group succeeds another, hilly country intervening, covered with dense brushwood, and in parts with very dense bamboo jungle. Petunias of all shades, from pure white to dark lilac, and beautiful odoriferous Crinum delight the eye here. The defile of Tollogo, formed by the mountain groups of Tollogo and Kajumbo, is a narrow valley, with a little brook running through it, and is very carefully cultivated. The population must be very dense; we found the people actively engaged in field work, in which the women also assisted. The villages lie, as everywhere in this region, high up on the mountains, each house, enclosed in a thick fence, upon a small artificially formed terrace; the surrounding rocks, which closely resemble the older huts in colour, serve as admirable hiding-places in case of attack, and the numerous stones make still better weapons. Quite peculiar to this district is the practice of fencing-in the fields with the green growing stems of the *Boswellia papyracea*, the sweet-smelling resin of which is found in large drops between the thin and ragged scales of the epidermis.

A sharp turn round Jebel Tollogo leads to the capital of the Lokoya country, Rinyak, marked on the older maps Rignia. The people here are certainly Bari, but Latúka is

much spoken. The district of Liria, to which the Lokoya mountains belong, is the most densely populated Bari district I have seen. It is very mountainous throughout, and contains very lofty elevations, such as Jebel Oppone, the outlying peak of Jebel Tollogo, which in good weather is visible even in the northern Shúli district. Red durrah, sesame, a very small kind of Lubia, tobacco, and two varieties of gourd are cultivated. Khor Loddo, about four hours' journey from Chief Rugang's village, Rinyak, forms the boundary between Bari and Latúka. Before reaching it, however, there is a swamp full of Cyperaceæ, which the elephants and buffaloes of the surrounding country seem to have chosen for a dwelling, and which takes about an hour to cross. Masses of iron ore lie exposed in the bed of Khor Loddo, totally differing in formation and appearance from the bog ore so common in this country.

The descent, which began at Rinyak, became more and more considerable. The country in front of us once more assumed the form of a large plain, extending at the same level almost to Lóronio, and forming, as it were, a second terrace after leaving Gondokóro. Till within a short distance of the station of Okkela (Baker's Wakkela), the yellowish-white sandy soil is covered with open woods of acacias, Zizyphus, Balanites, and other thorn-bushes usually found on such flats. Near to Okkela the woods become more and more frequent, so that the road runs through fine park-like tracts; the dark foliage of Kigelias, spreading boughs of sycamores, and pliant branches of Grewias, together with handsome butter-trees, Detarias yielding edible fruits, euphorbias, and dolébs, mingle with other forms of trees, while groups of aloes and nests of Sanseviera are found among them. Khor Ginetti, or Kanieti, the name adopted by Baker from the Danagla, rises in the northern Shúli mountains. In the Bēr district, which lies to the north, it is named Chol, and there unites with Khor Kōz, which flows down from Tárangole, and loses itself in the swamps of that country. It contains water all through the year, which indicates the existence of springs in the mountains; it lies in a deep bed, the rather high loamy banks of which give its water a yellowish tint, and it often swells so considerably after a few hours' rain that it cannot be forded for many hours.

Okkela has long been noted for its astonishing abundance of game, and for the collector it is a real paradise. The number and variety of monkeys is particularly striking, and the lions are so numerous that you meet with them in twos or threes on every excursion into the wood, but they have never been known to attack men, while leopards are, on the contrary, much dreaded.

Five hours' journey towards the east-south-east takes the traveller through park land and growing crops to Lóronio, Chief Latomé's village, which, picturesquely situated on a high hill, probably contains 1500 to 2000 inhabitants in its bamboo-fenced houses. The old chief, famous far and wide as a rainmaker, is also ruler of thirteen other villages, which lie scattered over the country, and pay him taxes with great punctuality. A splendid view is obtained from the summit of the Lóronio hill, of the Loligono peak, to the north-north-west, in the Bēr district, of the whole group of the Lokoya mountains, and of the long western, southern, and south-eastern chains of the Latúka mountains, right down to Jebel Seréten, Jebel Dongotolo, and the distant Logere summits. The imposing Jebel Ekara—visible even from Rinyak—stands out among the other mountains, its truncated pyramid being surmounted by two pinnacles. It is called in Latúka, Chufal, and in Obbo, where it lies, Jebel Okirri, and may safely be identified with Jebel Asul (the "Honey Hill") of Baker's map, said to attain an altitude of 4000 or 5000 feet. The Lafit and Ittatók summits in the Lafit range, with the lofty Lodin, as well as Kilio in the south-western range, are very considerable elevations. Altogether Latúka presents a very mountainous aspect here, its main valley running from north-west to south-east. The swampy land round Lóronio harbours numbers of herons and storks, but far more remarkable are the many Balearic cranes, which walk solemnly about the fields in twos and threes.

Khor Kōz lies close to the station; it is now a broad and deep stream, but in winter it is quite empty, and therefore can hardly be considered anything more than a rain-water channel. On the way to Tárangole, the chief station in the Latúka district, this *khor* runs along near the road to the right hand, and often approaches quite close to it. The valley is here still very broad, but the Lafit chain encroaches on it to the left.

Here and there are high hills similar to the Lóronio, and generally crowned with large villages. The little village Loriajo lies, however, in the plain, and immediately beyond it is a boggy thicket, where the sticky loamy soil, into which we sank above the knee, is exceedingly unpleasant. A number of small rivulets cross the road here, all of them rain-torrents coming down from the Lafit range. Thick acacia bush grows rank in the sandy soil, which is sometimes yellow, sometimes white, and extends up to the fields round Tárangole, formerly the headquarters of the Danagla, and now a smart little military station close to Khor Kōz.

During the short time of its existence, the station has entered into communication with near and more distant districts, and people are often to be found here from the districts of Renga or Irenga, lying farther to the east, and from the Kuron mountains and Loba. The land is splendidly cultivated, has an excellent soil, and, besides possessing numerous herds of cattle and flocks of superior fat sheep, it supports a numerous and very well-disposed community, whose old chief, Maye, now only carries on the business of rainmaking, while the administration is in the hands of his son, Lajur. Viewed from the station, the valley to the south-east becomes narrower and narrower, and appears to be shut in, while almost east-south-east the jagged mountains of the Irenga chain come into sight for the first time; they seem to be higher than the nearer mountains, and they form a long chain with very curiously shaped horns and teeth. The distance from here to Irenga is estimated at three to four good days' march—but what was meant by one of these day's marches we were presently to learn. The unexplored countries of Akkara and Musingok, with the rivers of Tu and Ogeloquer, border on Irenga.

The people of Latúka are entirely different in form of face and structure of head, and stature, from the tribes dwelling around them, and must, doubtless, have forced their way here from the east. Their language and customs are also quite peculiar to themselves. I collected examples of the former;*

* The vocabulary collected by Emin Pasha proves conclusively that the Latúka are Wakuavi (Masai), and they are coloured as such on Mr. Ravenstein's map of Eastern Equatorial Africa, published in 1883.

the latter have been on the whole faithfully described by Baker. Their weapons, their passion for the chase, and the continual feuds which decimate the country have also been referred to by him.

Tárangole does not by any means lie due east of Okkela and Lóronio, but considerably more to the south than either of them. From here to Agaru we traversed country yet untrodden by any traveller. The entire distance is twenty-two hours forty-one minutes good march, and, as we could only march four hours and a half the first day, the journey was accomplished in four days, each day's march including a rest for the porters, lasting from 5.30 A.M to 1.30 P.M. On the first of these marches we crossed Khor Kōz twice, and reached the village of Elianga, where, in the large durrah-fields close to the road, we saw a number of clay vessels filled with human bones. At the second ford, called Churchur, friable white-veined granite lies at the edge of the *khor*, a large dense wood of doléb and dum palms covers the bank, and the melon-like smell of the orange-coloured doléb fruit is perceptible at some distance. Throughout Latúka the doléb palms form in places regular woods, and in the fruit season they provide the natives with food in various forms for about two or three months. I was surprised to find the dum palm (*Hyphæne thebaica*) so far south as this, for on the Bahr-el-Jebel it is not found to the south of lat. 5° 30′ N., and from there to the southern frontier of Ugánda it is never seen.

At the village of Loggurén, which is situated like a fort upon a hill, the road branched off to Logere, Kuron, and Irenga; unfortunately, I was not able to follow it. The country near Jebel Ghattal has a heavy red clay soil, and was covered with industrious workers clearing away stones from among the young crops. As the land slopes very much, and, after the slightest rain, rushing brooks roar down over the rocks from the mountains, all the fields are surrounded with hedges of straw and hay, which afford some protection. The scenery is very fine, cultivated land alternating with park land and crags. The valley before us narrowed more and more, the mountain groups of Ghattal, Dongotolo, and Bayango on our left, and the long, lofty Lomu range on our

right, approaching nearer and nearer to one another. When crossing the hills, a number of mountains and mountain groups were visible, lying partly in the unknown countries to the east of Latúka, partly in the north-east of the Shúli district. Thus, from the heights of Jebel Khofir, which we climbed over to reach the other side of the valley, the lofty Toë, in the Harrogo district, came into sight, and among the distant Irenga mountains we saw the dome-shaped Baya and the Zummo Peak, which last is certainly higher than all the rest. Jebel Seréten, which, seen from Tárangole, seemed to shut in the defile, now lay beside us, and we spent the night at Khor Kōz, which we had not seen for some time, as it had flowed at some distance from our road. As soon as we had crossed the *khor* the road took a westerly direction. The soil here is a hard red clay, containing masses of quartz fragments, often of a beautiful milky white colour, which are used by the Shúli in the manufacture of the little cones which are worn by men and women in the under-lip. Jebel Seréten forms the boundary of Latúka on the Shúli side.

A number of small rivulets and some large torrent-beds intersect the country. The vegetation during the first part of the route consisted of dense acacia bush, and farther on of open bush, such as is found on steppes. A quantity of Calotropis and three varieties of euphorbia were thriving well on sandy spots. Khor Okorra, a true mountain stream, rushes down from the adjacent Halanga chain, and in a deep gorge, which keeps its water icy cold, sweeps round the foot of the high hill of Kela, which is covered with Shúli villages, and where the little station of Agaru is situated. The high position of this station (3700 feet), its cold water, and moderate temperature, render it the healthiest and most pleasant place of abode in this country; its surrounding mountains and hills also make it very picturesque.

From Agaru to Fadibék was a hard day's march of eleven hours fifty-five minutes. We passed by the Langia range, then crossed Khor Arenga, with its beautiful "gallery" wood, and reached Jebel Lamo, or, as it is usually called, Falogga. We were now in country traversed last year, when I marked on my map the mountains, such as Lamo, Lalak, and

Aggu. Fadibék has grown into a large and beautiful station, and is the centre of numerous smaller establishments in the Shúli district, viz., Fallibek, Farajok, Fajulli, Lira, &c. The excursion to Fajulli, the frontier post towards the Lángo country, proposed last year, and now rendered necessary, was actually made, and opened up a new and extensive mountain country, which may be looked upon as the southern slope of Shoa, Kaffa, &c. Ascending gradually through the district Labongo, we reached Khor Bagger, which we had crossed last year on the way from Fadibék to Fatíko, and which may be considered the chief tributary of Khor Asua, for its course is longer than that of Khor Atappi. A savannah, interrupted occasionally by thickets of brushwood, stretches from here for a considerable distance as far as the steppes of Koliang, Termayok, Turkan, and the prairies of the Lángo country in the south-east. Tall forests only exist round the mountains, where alone there is always plenty of moisture.

The traveller need not be surprised if he often traverses long distances of two to three days' march in the Shúli country without meeting with any villages, as these savannahs are reserved for the chase. At Jebel Leruama settlements and fields begin again. The corn was nearly ripe when we passed. On the hill of Gikkōr there were patches of *Musa ensete*. From its heights I was able to take observations, connecting my work in this part with that in Fatíko. The station of Fajulli is very unfavourably situated in the midst of a wide hilly savannah. It has no surroundings worth speaking of and no outlook, but it forms a centre for the people in the south and east, who come to barter their ivory for glass beads, copper, brass, &c. This accounts for my finding men here from Bognia and Lirēm, from whom I obtained information about their countries, which lie at a distance of eight to ten days' journey from here. They wore the usual Lángo head-dresses, and spoke Lángo, which is quite different from Shúli. Unfortunately, we had to return to Fadibék by the way we had come, for the road through Fachér, Ogilli, Akkara, and Oppei was longer, and would have taken at least ten days more, which I could not spare, owing to engagements elsewhere. I was therefore unable to complete and correct my notes of this journey.

We turned our steps from Fadibék through Mádi to Farajók, on Khor Limur, and after settling some boundary disputes among the Shúli tribes, we crossed Khor Atappi much farther up than last year, and arrived at Obbo, where the roads between Labóre, Latúka, and Fadibék meet. A compass bearing of Jebel Okirri, our old acquaintance of Liria and Latúka, completed my triangulation.

We are to go next to Laboré.

LABORÉ, *May 26, 1881.*

We arrived here this morning. About nine hours' march through hilly country overgrown with high grass brought us to Ogillì, a village in the Fanyiquara district, where the porters were changed, in order to proceed as quickly as possible. The district of Fandiker, with its capital, Fagger, joins on to the above district, and their extensive corn-fields are also contiguous. As there were no large *khors* to cross, and the grass was not high enough to cause any difficulties, the march was quite pleasant. It has not rained here for a long time, and while the people, particularly in Fajulli, and we ourselves, have been complaining of excessive humidity and too much rain, it is the exact opposite here. At Derreto, a little village on the way, all our porters ran off, and only the kindness of Jatā, the chief of the place, enabled us to reach the village of Kérefi on the same day; there we found our last year's huts. When we entered the Fanyiquara district we had left the Shúli behind us. We are now in the Mádi country, which is a recent encroachment on the Shúli country from the west. The ground from Obbo to Kérefi, although crossed by many and sometimes rather high ranges of hills, gradually falls to the river; Kérefi itself lies considerably higher than Laboré, but this difference of altitude within so short a distance (three hours' march) is amply accounted for by the steep face which the Kuitu hills present towards the Nile opposite Laboré.

My very limited time prevents me at present from making a map of my routes and working out my positions. Therefore, pray excuse the incompleteness of this narrative, which is only intended to give you some idea of my wanderings. That

these journeys, which were undertaken for the control of the Government service, the inspection of the officials and of the work accomplished, and the protection and improvement of the Negro population, have also contributed to the pecuniary advantage of the Government is, I think, proved by the fact that I have delivered into the magazine here, about ten hundredweights of ivory and five or six pounds of ostrich feathers, which were presented to me by Negro chiefs in return for the presents I gave them.

V.

TRAVELS TO THE WEST OF THE BAHR-EL-ǯEBEL.

1. From Ladó, on the White Nile, through Nyambara to Kediba, in the Kederú Country.

OFF ON A HOLIDAY!—A SWAMPY TRACT—A DEFEAT OF THE DANAGLA—KHOR KODA AND ITS FLOODS—A NYAMBARA DANCE—A NYAMBARA VILLAGE—ARRIVAL IN KEDERÚ.

With almost the same feelings that fill the heart of a schoolboy when the first day of his holiday has begun, I left Ladó, with all its heat, behind me on the 15th of September 1881, bound this time for the north, to inspect the old *mudirië* (Government department) of Rōl. Immediately behind Ladó there extends a trough-shaped depression edged with thickets (running, on the whole, from south to north), which is swampy in parts, owing to the large amount of rain that has fallen this year, and in other parts sandy and covered with impenetrable bushes of thorns. It harbours numerous lions, so that the traveller has to be very wary. A delicious scent is given off by millions of yellow and pink acacia blossoms, which, together with Balanites, Zizyphus, Randia, and similar thorns, flourish in such sandy flats, forming at the same time a favourite resort of the Fringillidæ, which swarm in this region. On clearings in the midst of this chaos of thorns are situated the little hamlets of the Bari chiefs, Yalo and Mari, which together form the district of Nyori. They were enclosed in hedges of blossoming euphorbia, and surrounded by extensive yellow sandy stretches and numerous fields of durrah, the second crop this year. The eleusine was still small, and the Lubia had hardly sprouted. Large swarms of geese enliven these fields, and

Hoplopterus and *Sarciophorus tectus* are also frequent guests. One of the most curious members of our flora, *Adenium speciosum*, Fenzl, fittingly compared by Marno to a baobab left sticking in the earth, is very often found here; the Bari call the plant *Loréni*. We had to wade knee-deep in water and mud through the broad swamp (which we had crossed the previous year at a point much farther south) in order to reach the Makraká road, which leads, over a slightly rising and very sandy region in the district of Kuji, to numerous euphorbia enclosures, where, at the time of Dr. Junker's travels here, a great many hamlets and herds were to be seen. To-day the woodpeckers hammer upon the fences, and wild grass and Solanaceæ cover the ruins of the huts, with more sympathy than men, who at this very place hunted down the cattle and their fellow-creatures.

Nersho's small village of Koka, where we passed our first night, lies in the midst of Lubia fields, to which the clumps of trees on the sandy flats form a pleasing contrast. The total absence of palms is remarkable. The *Hibiscus sabdariffa*, which is grown so extensively in the Shúli country, is cultivated here; its purple leaves, and a white or purple fleshy calix and large pale yellow flowers, give it a very showy appearance. In the Shúli country the calix is relished on account of its acidity, but the Bari only use the seeds, a mucilaginous decoction of which is poured over their meal-porridge. We had had to leave the Makraká road to get to Koka, and now we had to find it again by the help of the glorious moonlight. Our picturesque procession made its way straight over the sand and through the thorns: a motley company—people from Nyambara and Amadi; Chief Dōli, with his numerous nude and lusty beauties; lanky, narrow-chested Agār; soldiers, and Danagla. Majestic trees, chiefly sycamores and tamarinds, and sometimes Parkias, formed thick woods here, and then we came to tall grass, bent low by the wind and its own weight, and often blocking the road. Numerous game-tracks and elephant-runs cross these plains.

As soon as we reached the Makraká road, a view opened up of Jebel Malokwán and the chains of Reko and Mire; behind, Jebel Kunúfi, and to the left, Jebel Veya (Vio), and several more

distant mountain groups of the southern Fajelu district, made their appearance. Our route led over a plateau of ferruginous clay, concealed beneath a layer of sand formed by disintegration; it was studded with sparse bushes, and intersected by many small water-runnels, which in the *kharīf* help to swell Khor Nyamini. At this time the *khor* contained a good deal of water. Here our route left the Makraká road for good, and after passing between several picturesque groups of rocks and through some swampy depressions, it led us on to a wide savannah. A tall tree marks the place where eighty Danagla lost their lives, and their comrades had to beat a disgraceful retreat while attacking Chief Langajo's Nyambara *zeríbas*, which formerly were situated here. Since that time, Khor Nyamini has been called in Arabic "Khor Temanīn" (the "brook of the eighty"). My guide, Tombe, Langajo's son, and now chief of this district, was present during the attack, and he now carried a gun which had been captured on the occasion. Khor Berr flows through high grass, which shuts out all view. The Bari call it Kongolo-Kob, but by the Arabs it is called Khor-et-Tīn, because its water is of a dirty white, owing to the loamy soil of its banks. It comes from northern Fajelu, and flows into Khor Nyamini.

After midnight there was a violent thunderstorm, which produced the inevitable confusion that always follows such events; in the early morning all were asleep, so that we did not start till late. The country before us sloped, and was on that account mostly swampy, but marching is fairly easy even through a swamp when a good firm strata of clay lies underneath. The whole land is covered with exceptionally high grass, interrupted occasionally by steppe vegetation and thorn thickets. Kigelias and splendid Dalbergias are very abundant here; where the soil becomes drier and sandier, dense copses of acacias are found, of two different species, one with white thorns and pink and yellow catkins, the other with long stiff white thorns, two or three of which are often situated on a large black protuberance; the white blossoms of this kind are wonderfully fragrant. Reddish-brown, lofty ant-hills, with crenelated spikes and points, are scattered here and there. Large numbers of pigeons, whose liking for moist ground I have

before mentioned, were cooing in the tall trees. Otherwise, birds are not plentiful, although red widow-birds (*Euplectes ignicolor*) climb about the grass stalks, and the confiding grosbeaks (*Crithagra leucopygia*) warble their varied stanzas to the wanderer from among the acacias. Khor Koda, which we crossed this time much farther to the north than last year, contained about twenty inches of water in a bed ten feet broad; at high water, however, it overflows the land far and wide, and one has frequently to wait for days before being able to cross it. The banks are sandy, and three to five feet high. The country lying to the west of the *khor* is completely flooded in the *kharīf;* at present a small portion of it is dry, and after crossing it we arrived at the Bamban swamp, through which we waded; it was in many places over three feet deep. To the right and left of the ford the swamp extends to a distance of about a mile. It is covered with thick grass, except in isolated spots, where many hippopotami and still larger numbers of crocodiles are found. Swarms of dragon-flies flutter above the swamp, and are chased by bee-eaters (*Merops albicollis*). The rise of the ground after passing the swamp is at once made evident by the presence of whole colonies of a species of Sanseviera (named *Tora* in the Nyambara idiom), the fibres of which are used in ropemaking. Shortly before arriving at Tombe's village of Jubba, I noticed cultivated patches of Penicillaria, so rarely seen in the Bari country, and the more common eleusine just running to seed. The village lies upon the top of a hill, and overlooks the district of Lofúta, of which it is the chief village.

The rest of the day passed in building huts and making ourselves comfortable, in making hypsometrical observations and calculating the height of the hill. We were obliged to wait here for porters from Morú, for those who had accompanied us from Ladó belonged to this place, and it would not have been right to take them farther. The sun sank, and myriads of glowworms pursued their fiery course through the still air, whilst the stars twinkled overhead, and the sheet-lightning seemed to set the sky on fire for several minutes at a time.

Chief Tombe had placed his big drum underneath the votive tree which stood in the open space before my hut, and it soon

sent forth a sound of invitation to a dance, three strokes at a time being continually repeated. Immediately the people collected together, and in a minute two long lines were formed, one of women, the other of men, each person holding two sticks made out of the excellent wood of the *Diospyros mespiliformis*, which, when struck, gives out an almost metallic sound. The big drum then began to beat in three *quaver* time, accompanied by a small drum, while the sticks were struck against each other, and a chorus formed a prelude to the ball. The hopping rhythm of this really pretty production was succeeded by a processional march of men and women simultaneously round the drum, accompanied by singing, but this solemn demeanour did not last long. The drum struck up a lively tune, some of the young men jumped high in the air and crowed like angry cocks, some of the more eager women began the exciting trilling sound of which all Negro women are so fond, and suddenly they launched into an *allegro furioso*. The men jumped high, and on alighting rebounded, the sticks clattered, the singing gradually swelled, here and there a woman advanced to the men, hopping and swaying her body alternately to the right and left, while her arms revolved like the sails of a windmill. Her challenge was at once accepted, the men springing forward, two or three at a time, to fight for the possession of the women. The enjoyment became more and more universal, the men throwing off their inconvenient clothes, the women allowing their aprons and tails to fly away, until a furious dance was being performed round the drum, the women inside, the men forming an outer ring—a veritable pandemonium, lighted up by the red glow of torches, which were brandished by the dancers, and from which a shower of sparks was scattered far and wide.

On such occasions, it is difficult to know what most to admire —the untiring endurance of the dancers, who have been working during the day, or the primitive genuine enjoyment that is mirrored in all these sparkling eyes and shining rows of teeth. Women with infants on their backs, but more often with children of four to five years of age, are the most indefatigable dancers, and perhaps it is these gymnastics, carried on from early youth, which account for the healthy development of the Negroes, and the absence of deformities among them. It is also

noteworthy, and may be mentioned in praise of the Negroes here, that their dances are entirely free from obscenities, which are the order of the day in Unyóro and Ugánda. In dealing with uncivilised people, it is difficult to say what is modest, what immodest. To our ideas that may seem to be immodest which is not so to them, and the improprieties may not be greater than among civilised men, for in this respect the old principle, *Naturalia non sunt turpia*, holds good to its utmost extent. Dr. Schweinfurth's ingenious remark, that the music of the Negroes is learnt by listening to the music of the elements, can be very justly extended to their dance, which is only a mimicry of what is seen going on in nature. The men dancing around the women, who encourage them by alluring pantomimic movements, may be seen also in the animal world; and the fundamental ideas underlying all Negro dances point to their common origin, the many immaterial variations extant being due to the varying occupations most in vogue among different tribes. But how are we to account for the fact that the Negroes, although they are eminently musical, and have an exquisite perception of time, have never yet succeeded in harmonising their choruses?

The village of Jubba lies, as I have said, upon a hill, and contains only about one hundred and twenty huts and their granaries, most of the Negroes belonging to the place living in small *zeríbas* at from half an hour to two hours' distance from it. Differing entirely from the Bari style, these dwellings have elongated conical roofs, placed upon a circular substructure of about three feet in height. The grass covering the roof is not arranged in layers one over the other, but in one layer from top to bottom. The entrances are low, the interior dark and undivided. Corresponding to the style in vogue farther north, there are a few huts erected upon platforms, which are raised upon stakes about five to six feet above the ground. Every wife has a separate hut and granary for herself and her children. Flat open pieces of ground, where sesame and corn are beaten out, votive stakes covered with all sorts of skulls and horns, and the round fruits of the Oncoba are found between the huts. The cultivated plants that I saw were Penicillaria, eleusine, hibiscus, Hyptis, tobacco, gourds, and Lubia.

There are hardly any cattle, owing to the insane raids of former years which deprived these districts of their entire possessions in cattle.* The people keep fowls, and generally make clay cages for them underneath the granaries; there are also a few dogs. All the inhabitants are Nyambara (Khor Berr is the boundary between this and the Bari country), who speak a language differing only dialectically from Bari; numerous Mádi words are, however, mixed up with it, and point to a long-continued contact with that people, whose migration from the west to the east drove the Nyambara, who lived in the south, towards the north.

To some extent at least, the Nyambara physically resemble the Bari, but they have rounder heads and more compact bodies. The colour of their skin is a pure chocolate brown, often almost running into black. The extraction of the incisor teeth and their habits and customs are the same as those of the Bari. I was rather surprised to find here women belonging to the Morú tribe married to Nyambara men. Although the Bari, more frequently than any of the Negroes of these countries, leaves his home and settles anywhere where cattle and red durrah thrive, it is an almost unheard-of thing to find a Bari married to a woman of a different tribe. This is also the case among most of the northern tribes, for marriage with women of strange tribes is not permitted. It was, therefore, the more surprising to see these fat, short Morú beauties, ornamented with leaves, amongst the Nyambara women, with their long aprons. Nearly all the men here are clothed with a few cotton rags, but their attire is very scanty, and they wear as ornaments, by preference, necklaces of teeth and small tortoise-shells, as also beads and bracelets and anklets made of iron, copper, or brass. Waist-belts, too, as among all Negro tribes, are indispensable. The women's leather aprons are often prettily decorated with glass or iron beads, and the fringed aprons worn by the young married women often display very delicate chains made of coiled iron wire. A glittering, polished, dagger-like knife is here a part of the women's toilet. It is

* Emin Pasha refers here to the raids made by the Egyptian troops to obtain cattle and other supplies when they first occupied the country, raids which he found it so difficult to suppress.—R. W. F.

fastened to the waist-belt, and is not even laid aside when dancing.

The swamp of Lere, at the base of the hill, is a flat covered with thick grasses, nearly three miles broad; a rut running through it represents the path. On account of the long season of drought, the water even in the worst places did not exceed eighteen inches in depth. The passage, however, through the decaying slippery grasses was very unpleasant. When the swamp is full it empties a very considerable quantity of water into Khor Koda. From this point the road passed through broad stretches of grass, broken here and there by patches of thick brushwood; it was also crossed by a number of small brooks and swamps. Besides Anona, the most characteristic trees and bushes were Sarcocephalus, Oncoba, and many acacias, small groups of Terminalia, and larger ones of Vatica, especially where the moisture was considerable. We had to wander through a rather monotonous stretch of country before reaching the boundary of the Nyambara district, which is formed by the swamp of Lukomúkui. Reddish sand-patches, brushwood, and broad swamps followed one another, and we had also to cross small brooks, having large granite blocks strewn upon their banks. The Nyambara country borders upon Kederú, which is inhabited by a tribe of the same name, whose chief, Jorube (called Wod Loron by the Danagla), lives in the village of Kediba, which we reached at midday. Dokhn-fields and a solitary small doléb palm were passed upon the road. As the village only consists of the chief's huts, it is small, but a numerous Negro population has settled around it in small open hamlets. The huts are very small, low, and round, are constructed of wood, and have very shapely roofs, formed of grass layers, so neatly placed one above another as to look as if trimmed by shears. Near to the huts are graves marked by large pyramids of stones.

2. From Kediba to Biti—Condition of the Amadi District.

THE KEDERÚ COUNTRY—A VILLAGE FESTIVAL—MISDEEDS OF THE DANAGLA, AND RE-ESTABLISHMENT OF SOCIAL ORDER—THE MORÚ COUNTRY—NOTES ON THE AKKÁ.

Among luxuriant fields of Penicillaria, growing to a height of some ten feet upon the grey loam, we marched over hilly country, bestrewn with stones, and covered in most parts with bush. In the midst of the latter were numerous small *zeríbas* and industriously cultivated crops, where high wooden scaffoldings (often two storeys high) served as watch-towers and frightened away the birds, which visit the crops in large numbers. After passing the small Khor Ngorre, which was seven feet broad, but contained only a little water in its red sandy bed, we reached the important Khor Tafari, that here rushes rapidly almost from south to north, and is about fifty to sixty feet broad and five feet deep. The banks, which are fringed with beautiful woods, are of a grey loam; the eastern bank is about ten feet high, and steep, while the western bank slopes gradually to the water. The current has formed at this place a large sandbank. The natives assert positively that this stream joins Khor Itó farther to the north, and then assuming the name of "Gel," crosses the country of the Elyáb and reaches the Bahr-el-Jebel opposite Bōr. Numerous small watercourses join the Tafari, which is said to contain water throughout the whole of the year. All the hamlets which we passed were deserted on our approach by their inhabitants, who fled into the jungle. The fires were burning in the huts, and as soon as we had passed, their owners returned. The people here seem to be accustomed to rough usage, for in our province it would certainly never occur to any of the people to flee before a traveller. A Kederú hamlet gives one the idea of a child's plaything, owing to the neatness and diminutive size of the huts. We halted shortly after crossing Khor Pottokaï, where I observed the nests of the weaver-bird, which I had missed for some time. The honey-guides (*Indicator Sparmanni*) in great numbers tried hard to attract our attention, unfortunately in vain.

Another hour's march led us at last to a splendid watercourse, which is so picturesque that it has no rival in this part of the country. Climbing down its high banks, a richly wooded island lay before us, beyond an expanse of water some hundred feet broad, which we found to be three to five feet deep, as we waded round the point of the island. Just above the ford, Khor Labikko, a considerable stream coming from the south-west, joins this river, the Itó, which flows from the south. The united streams flow from the south-south-west to the north-north-east. The colour of the water is a light grey, but its taste is very good. Shortly after passing Khor Tafari, we had an example of the speed with which these watercourses can rise; this *khor* rose so suddenly, on account of rain which had fallen in the south, that the stragglers of our caravan were cut off from us, and only caught us up two days later on. The road from Khor Itó as far as Chief Dōli's village presented nothing worthy of mention save grass, steppes, small hamlets, and a view of several blue mountains and peaks.

Morlabba, Dōli's village, has about six hundred inhabitants, belonging to the Kederú tribe, who appear to be quite different from all the surrounding natives. The Mándari, who, to judge from their language, belong to the Bari, dwell to the east of Morlabba. To the north-west dwell Morú-Kodó (*i.e.*, northern Morú), who are erroneously called Mádi by the Mittu tribes; due west the same tribe is found, as well as the Mittu, and Liggi and Nyambara live to the south. The language of the Kederú differs entirely from that of the surrounding tribes; it appears, from its sharp *s* and rattling *r*, most like the language of the southern Mádi, and the cardinal numbers from 1 to 4 are identical. The name for 5 is different—*tau* in Mádi, *ndzi* in Kederú. The other cardinal numbers are formed in Kederú by 5 and an affix; for example, *dzidallo* 5 + 1, *dzidirri* 5 + 2, &c. All other numbers are, however, entirely different, as also the names of plants and animals.

The impression which the people made on me was very favourable; they were modest, even rather bashful, and they appeared to be chiefly occupied in agriculture, as the Danagla had ruined their cattle-breeding, and their fields covered the country in all directions. A kind of red durrah, not so bitter

as the species grown by us in the south, dokhn (Penicillaria), eleusine, a great deal of sesame, two species of Lubia, a little Hyptis, and tobacco are the chief plants cultivated. I also noticed large baskets filled with the woody fruits of a gardenia called *kirruru*, which is cooked and eaten. In physical appearance the Kederú are mostly of a middle height, with well-developed muscles and a good proportion of fat, not, however, being too corpulent. Their heads are rounder than those of the Bari and the Nyambara, and are better proportioned in both diameters, the forehead being more erect. The face is also rounder and less prognathous. The nose is short, and the lips not very pouting; the feet are small and perfectly flat. The skin is a good deal darker than that of their southern neighbours, although a reddish ground-tone is observable. The hair is sometimes worn partially shorn; this is, however, not usual, for the short locks are generally plaited with all kinds of ornaments, and, like the body, they are coloured with ochre mixed with oil. The ornaments are very various—from the tails of the genet cat, which the men carry hanging from their elbows, and the bead earrings worn by both sexes, to the huge iron rings with which they decorate the upper arm; everything, in fact, is represented which the Negro fancy can invent. The leaf-aprons of the women, often worn only for form's sake, vary, according to individual taste, from a thick bunch of green leaves, which form a real covering, to a simple green twig. The weak, but here very sturdy, sex is very scantily attired, and many of the greasy beauties, laden with iron rings, have absolutely no clothing save their colour. The women appear to enjoy the greatest freedom, and mix on all occasions with the men in a perfectly unconventional manner. The dance, which here also is accompanied by drums and the clapping of sticks, consists of a complete set of really beautiful evolutions, and the tingling of the anklets of the dancers in perfect time adds a new kind of music. I saw a young man being carried round sitting on the shoulders of a comrade; he was singing and gesticulating with his arms, spreading them out above the people, as if blessing them, and was surrounded by a ring of women dancing in a spirited manner, and crying shrilly, *Yo, yo;* it was a scene which might have

represented *Evoë Bacche*, especially as the beer-jars were in great demand.

A number of half-tame zebra-ichneumons ran about the village, as well as several fox-red baboons.

From Morlabba as far as Khor Gurud there is a stretch of very well-cultivated land; just at the ford the *khor* receives a tributary, which is now dry. Upon a path cut up by elephants and full of holes we wandered through the steppe jungle, which was rendered almost impassable by high grass, until we came to the bed of Khor Arise, which contained only a little water, twenty to thirty inches deep in places. It was fringed by thick Sizygium bushes, which are found in all such *khors*. For about half an hour we followed this easy road, which is, however, often impracticable for days, and then the path led uphill again to troublesome grass jungle, through which we had laboriously to work our way. Elephants are so numerous here that in an hour's march we came upon four herds, and saw altogether one hundred and twenty animals. Unfortunately, these colossal creatures destroy the road by sinking into the soft soil and leaving their footprints filled with water, as well as by throwing the trunks of trees across the path, to which obstacles the chaos of grass and thorns proves no pleasant addition. Guinea-fowl and francolins kept flying up every minute from the high grass to the side of the path. In favourable places I noticed a rich growth of yellowish-white fungus, often of considerable dimensions; whether edible or not I do not know. We rested under a magnificent group of Humboldtias. The Oncoba, which ripens long before this in the south, had only small green fruits here. In the middle of a group of about thirty tall dolêb palms the little village of Dāso was situated. It was in process of removal, however, as the fields were said to have become "old," that is to say, they do not repay cultivation. Nests of a large red ant, constructed of green leaves, and the size of a man's head, are found upon all the bushes; the bite of these ants is only to be compared to the sensation caused by boiling water on the skin. Numerous bats flew, even by day, around the summits of the dolêb palms. Most of the species of bats found here, and especially the large Xanthorpia, do not avoid the light so much as is usually supposed.

After passing a small *khor* by means of a natural bridge (*i.e.*, the enormous roots of a fig-tree), and then following for a time the road, which led through a swamp, thorns, and grass, we turned in the direction of Jebel Paya. The land here has such an elevation that the rise to the foot of this mountain was first noticed when we began to descend. The mountain proper, which lay at a short distance to the right of our road, rises to a height of about six hundred and twenty feet above the pass. It would have been impossible to ascend the mountain without great loss of time, on account of the exceedingly high grass and masses of bushes, so I did not attempt it.

The land now began to fall rapidly, especially towards the right, but, on account of the forest, no view was to be obtained, even in those places where cultivated fields intervened. The people here grow an immense amount of sesame, which thrives splendidly upon the rocky soil. Many dolēb palms, a number of small streams imbedded in the rock, all flowing in the direction of the Amadi river, and many cultivated fields, lent to the last part of this road a very pleasant variety.

Our headquarters on this occasion were established at Biti, Chief Kango's village. A number of official duties were awaiting me here. This village lies at a distance of about two hours from the great Danagla station of Amadi, which belonged formerly to the *mudirië* of the Bahr-el-Ghazal. I determined to find out how things were going on there. On looking over the records, which I had demanded, and which were only unwillingly produced, I found that they contained some curious information concerning the inhabitants, which I must not omit to detail. There reside in the district of Amadi, called also Kism Jur, in addition to forty Danagla in the pay of the Government, who act as a sort of irregular soldiery, no less than ninety-six other Danagla, of whom over twenty were, to all appearance, doing nothing, whilst fifteen made a living as traders, and forty-five were *ushurié* (tithe-payers), who, as a matter of course, neither cultivated the land nor payed tithes, and as many as eight were *fakīs*. To these must be added three hundred or more persons composed of dragomans, *farukhmiri* (Government slaves!), *makalil* (Negro soldiers of the

Danagla), and *shaiyalīn-zilla* (gun-bearers), all of whom are ready to be armed in case of war, or *razzias*, and are prepared to murder and to pillage. In times of peace these people make their captured slaves work for them, and should they not be able to cultivate sufficient food, they oppress and pillage the settled native population. The following are the exact statistics:—

Resident Danagla, as under:—		Dragomans, &c., as under:—	
Having no employment . .	27	Mittu . .	38
Ushurīe (tithe-payers) . .	46	Morú . .	76
Traders	13	Agār . .	5
Tailor	1	Nyam-Nyam (Zandē)	51
Boatman	1	Monbuttu . .	143
Fakī	1	Bongo . .	6
			319
In Government employ . .	40		
	129		

The unproductive population consists thus of four hundred and forty-eight men; and if to these be added lawful wives, concubines, children, boys for carrying arms, slaves, &c., at the rate of at least five to each man, it will be found that about three thousand people live at the expense of the Negro inhabitants of the district, who number from ten to fifteen thousand. In explanation of the presence of so many Monbuttu and Nyam-Nyam, it may be mentioned that after every raid into those districts large numbers of slaves were brought back, who were ultimately left to their own resources, as no employment could be found for them. In order to get rid of this rabble, I immediately gave orders that all people having no definite occupation were immediately to leave the country, and the agriculturists have engaged not to oppress the Negroes, to pay a yearly tax of a hundred piastres, and, in case complaints should reach me that they *have* oppressed or badly treated the Negroes, they will be at once expelled. Those persons following any trade will also be compelled to pay a fixed tax and to submit to the same regulations. One *fakī* has been taken into Government employ as a schoolmaster; the others are to return to Khartúm. The number of Government officials in this district is exactly forty, distributed over four or five small stations; if this small number has been sufficient to terrorise the whole country, one

officer and fifty soldiers will certainly suffice to ensure order. What sufferings these poor people must have endured!

Biti is situated outside the district of Kederú, in the Morú country, which includes Morú-Kodó, or "northern" Morú, and Morú-Missa, or "southern" Morú, a distinct dialect being spoken in each of these divisions. Although the language is perfectly distinct, and belongs to the westerly group of the languages of our province, the frisure, ornaments, weapons, and dress, if one can speak of dress, are exactly identical with those of the Kederú. Most of the women are perfectly nude, only some few of them hanging a small leafy twig from the back of their girdles. It is curious to note that if one meets a company of such *belles décolletées* carrying water, they cover their faces with their disengaged hand. All that you see in Africa seems to prove that modesty is only a product of education.

The village of Biti is rather straggling, and contains two hundred and fifty to three hundred huts, together with their granaries. The huts are usually built in groups of two and three, surrounded by small fences; they have bell-shaped roofs, and are, on the whole, rather larger than those seen in Kederú. They are constructed, however, in the same neat manner, and have small square entrances, which can be closed by day from the outside, and by night from the inside, by a kind of lid. From a hygienic point of view, it would be interesting to know how much oxygen is provided for the two or three persons to breathe who sleep in these hermetically sealed huts, in which a fire burns. Large baskets, plastered over with clay, placed upon platforms, about three feet high, and covered with conical straw lids, serve as granaries. Just now they contain reddish-white durrah and dokhn, which constitutes the chief article of food, and is eaten as porridge, served with vegetable sauces. Various species of gourds and Gynandropsis thrive everywhere, and provide the materials for these sauces; yams and other roots also find their way into the kitchen. The tobacco grown in this country (*mashirr*, or *Nicotiana rustica*) has yellow flowers, and is very strong. It is chewed as well as smoked, the former practice having probably been introduced by the Danagla. Disorder and dirt rule throughout the whole village, except near the

graves, which lie amongst the huts, and are conical mounds, covered by stone pyramids, or enclosed within a circular fence made of branches. Bodies are said to be buried in a squatting position, the chin being placed upon the knees, and the arms around the shins. As a rule, the henhouses are built near the graves; they are cylindrical in form, and constructed either of stone slabs covered with clay, or else of wattle and daub, with heavy stone lids and doors. The fowls are very small; many are without tails; they are good layers, but their eggs are small. The ancient wealth in cattle of this country has become mythical. Hunting appears to be little practised; the country literally teems with herds of elephants, but no one ventures to attack them. In fact, the Negro tribes in this part of the country, as well as in Makraká, are very indolent; they are wanting in elasticity of mind and stamina, comparing unfavourably in these respects with their neighbours, the Dinka, Bari, and other tribes. This weakness of character has enabled the Danagla to obtain a footing in the country, and has exposed it to robbery, and to the evils inflicted by the slave-trade. The whole village is filled by dogs of the breed common to this country; many are white, with yellowish-brown spots; others are liver or fawn coloured. No one has thought of training them for the chase.

Some ten minutes to the north-north-east of the village there is a broad watercourse, at present dry, which leads to the Amadi river. Many names are given to it; the Kederú call it Rodi, the Morú, Eyi or Ayi. Water of good quality, although rather milky, is found in the sandy bed of the *khor*, very near the surface, as also in other places in large basins surrounded by blocks of rocks. The *khor* is fringed by luxuriant vegetation, amongst which are fig-trees, yielding small but tasty figs, and the Anogeissus, called *silek* by the Arabs, which is much prized on account of its excellent white wood. The Carpodinus tendril, from which indiarubber is obtained, is also very common, and is called *bono*. Masses of tall bamboo edge the *khor*, which must sometimes contain an immense quantity of water, for, at a height of six to eight feet above the surface of the bed, masses of plants, carried down by the current, hang upon the bushes. Animal life is varied and abundant, and

especially among the birds striking varieties, such as *Schizorhis*, *Irrisor erythrorhynchus* (a mad chatterer), and parrots, are very numerous. Among rarer visitors may be mentioned *Corythaix leucolopha*, which, in small companies of two or three, coo and laugh in the tips of the highest trees. Their red wing feathers are used in the district of Bufi for the discovery of thieves.

My Monbuttu escort increases from hour to hour, especially since the arrival of Gambari, the chief of the district of Kubbi, which is inhabited by Monbuttu and Zandē; he had been kept a prisoner during two years in the province of the Bahr-el-Ghazal. To-morrow one hundred and five men, women, and children are to be sent to their homes, and numbers are still coming in requesting to be sent home. The Monbuttu, quite contrary to the usual practice among Negroes, are very clannish, and appear to possess a real love for their native country. When I playfully suggested to the girls that they should marry here, they resented the idea quite angrily. The Nyam-Nyam, too, love their relations. I have seen a boy, ten years of age, who came all the way from Dongu to see his brother in prison. The most comical figure in the motley crowd which here surrounded me was Asiká, an Akká, about thirty-five years of age, who had been measured by Felkin in Rumbēk, and had now established himself here. He is a noisy fellow, and rather tall (five feet five inches) in comparison with eight other individuals belonging to his tribe whom I measured.

Gambari and this very wide-awake pigmy told me that the Akká are divided into numerous small tribes, and have no settled abodes. Hunting is their only occupation, and they lead a nomadic life among the Monbuttu and Amadi. Tribes, however, which nomadise in one of these countries do not intermarry with tribes nomadising in another, and the Akká of the Mabode country, for instance, never mix with those in the country of the Meje. One tribe in the Meje country has a pale yellow complexion. If a company of these wandering people arrive near the residence of a chief, they build small huts for the married people, the unmarried having to be content with simple sheds. They generally establish themselves along the

rivers, where game is abundant and safe retreats available. The chiefs near whom they dwell are compelled to provide the Akká with corn, bulbs, and whatever else is necessary for their maintenance, in return for which they receive the skins, feathers, tails, &c., of the animals caught in the chase. They are very vindictive, and if refused a request they become dangerous. They are exceptionally expert as hunters, and I had an opportunity of witnessing their dexterity in killing birds, which they shoot with arrows from which the iron tips have been removed.

This morning another Akká was brought to me. He was about twenty-five years old, and his two conductors could hardly hold him fast. He was one of a number of Monbuttu slaves whom I had confiscated the previous day. He had only recently been brought here from his home with the Monbuttu slaves whom I seized yesterday, and he had hidden himself, from fear of being killed and eaten, in the straw roof of a hut, where he had remained undiscovered until driven out by hunger. Notwithstanding his resistance, he had been brought here from Amadi; on the road he escaped into the high grass, and was only recaptured after considerable trouble. I ordered his release, but he protested energetically against accompanying the Monbuttu, and demanded to be allowed to go to his home by himself, which was at last permitted him. He had a reddish but rather dark skin (probably dirt), was very prognathous, rather swag-bellied, but exceedingly nimble. His height was three feet six inches. His whole body was covered by thick, stiff hair, almost like felt, which was especially thick on the breast, around the navel, and on the pubes. This was the case with all the Akká I have as yet examined. The wrinkles of their skin, especially at the corners of the eyes, are very remarkable, and give to the Akká their lachrymose expression, also making them look older than they really are. Mixed marriages between the Akká and Momvú result in individuals having a coppery complexion, playing into yellow, whilst in all other respects the Akká type predominates. A girl of about fourteen years of age, the issue of such a marriage, measured three feet seven-eighths of an inch. The smell of the perspiration, which is very penetrating and

exceedingly unpleasant, and which is noticed amongst all the southern tribes, is especially strong in the Akká, the Nyam-Nyam, and the Monbuttu; it is most perceptible during physical exercise, and after any special mental excitement. Even a lengthened residence in a foreign country, together with extreme cleanliness, hardly diminish the intensity of this smell.

From the top of a mass of gneiss lying near the road to Amadi, I was able to take some compass bearings, which I believe connect my recent with my former work, as also with Felkin's surveys. The river at Amadi had perhaps best be called Ayi or Eyi, for the names Rodi and Dōk are only applied locally. With regard to the name Bahr-Jemid, it is derived from that of a small Dinka village, past which the river flows.

3. From Biti to Bufi—The River Lau.

GNEISS HILLS—GRASS STEPPES—JEBEL YERE AND ITS CAVERNS—PILE-DWELLINGS OF BUFI—THE SLAVE-TRADE—A LADY VISITOR.

The rain prevented our departure yesterday, and to-day the outlook was not much more promising; but it ceased at last, and we started in good time. After crossing Khor Barra we entered upon hilly country, covered with bush and intersected by many small *khors*. The latter were dry, but the high sand-dunes on their southern banks showed how great had been the force of the rain-water which had rushed through them to the Ayi. A long broad row of round gneiss domes and ridges, often of considerable height, stretched over the whole country. Small woods of acacias had obtained a footing round many of them, and numerous rock-hens (*Ptilopachys ventralis*) sheltered in their clefts and grooves, and were already busy pairing. Elephants too, to judge from their fresh spoors, must be very abundant. The steppe woods, in which groves of Anogeissus are found, form a refuge for numerous parrots. We saw quantities of tamarinds heavily laden with fruit, and

perfect thickets were formed by a species of Zizyphus with inedible fruits (called by the Dinka *langa-konn*, *i.e.*, elephant-zizyphus), together with Randia, which is known as *kār*.

After a good three hours' march, we halted on one of the rocky ridges just mentioned, from which I managed to take some compass bearings. In some small water-puddles lying in rocky hollows I saw flowering water-lilies, which, not requiring much moisture, are apparently capable of surviving a period of drought. Their seed, called *beshinīn* in Egypt, and *sittēb* in the Sudān, is converted into flour.

The scenery undergoes a change here, for a real grass steppe, with isolated trees, replaces the woods, and the sandy soil favours the growth of euphorbia. Rocky domes and ridges abound here likewise, and from one of the summits we saw Jebel Yere in front of us. It was rather higher than the surrounding domes, near one of which we were to camp for the night. Khor Kokóbere, containing a good quantity of water, flowed along its base, bounded by masses of gneiss. Jebel Yere presents a flat back, and yields a splendid view over rolling, well-wooded, and, to judge by the numerous pillars of smoke, well-populated country. Towards the north and east no elevation could be seen; in the west it rained, but in the south and south-west many peaks and mountains that I had previously noticed and marked down were visible. The broad river, now seen for the first time in front of us, is about a quarter or half an hour from the mountain, and flows from south-west to north-north-east.

Jebel Yere is famous on account of its large caverns, in which the natives took refuge, with their herds and corn, when their country was occupied, and where they for a very long time resisted their conquerors. In one of the caverns there is said to be a very deep fissure, which reaches down to the water, and anything which falls down it comes out again by the river. An investigation of the caverns showed that the entrances had been very carefully blocked up with stones and thorns, to prevent the entrance of wild animals. I found an Entada, called *kangbá* by the natives, growing here abundantly on the rocks; it is eaten with relish after being peeled in hot water.

A second broad belt of gneiss reefs and ridges, from which large slabs may be lifted, extends beyond Jebel Yere. The

rock is generally whitish-grey or bluish in colour, and sometimes it shows broad stripes in white or dark grey. Petherick and Dr. Schweinfurth have already noticed these remnants of an ancient range of mountains. The steppe wood is mostly filled with high grass. On the whole, the ground is composed of that widespread red clay, covered with quartz rubble, which becomes more and more predominating as we proceed to the south. Here and there the upper stratum has been worn down into coarse sand, and towards Bufi yellow alluvial sand occurs with quartz fragments. In the depressions, however, a black layer of humus overlies the red clay, and forms in wet places muddy pools, which are the favourite haunts of elephants. On the other hand, in drier places it is even now cracked and fissured in all directions.

The grass steppe, with its clumps of doléb palms, is succeeded beyond Khor Lomarió by a dense acacia bush, passing which we entered extensive fields of durrah and dokhn, interspersed by places where the bushes and high grass had been left standing in order to provide material for building purposes. Thousands of finches haunt these fields, and are a great plague. The havoc which weaver and widow birds (Hyphantornis, Euplectes) are capable of perpetrating in maize and dokhn fields is absolutely astonishing. A covering of green leaves does not always suffice to protect the maize-cobs from their strong conical beaks. We reached the river shortly before midday. The path led so close along the edge of its yellow loamy bank, which is sixteen to twenty feet high, that if we dropped a paper it fell into the water. The latter was now of a yellowish colour, and appeared to be alive with fishes.

Here, at last, we were among the pile-dwellings. A platform, supported upon over three hundred stout piles, each one six feet high, stood within a broken-down bamboo fence. It had a length of ninety feet, a width of eighty feet, was made of timber and brushwood, and covered with clay and cow-dung, to form a level flooring. The ground-floor among the piles serves as a kitchen and storehouse; the water-jars and the *murhakka* (grindstone) are placed in it, and the servants sleep there. A square hole in the centre of the platform provides this lower room with light, and ladders lead through the hole to the platform. This

latter is divided by a reed fence into an outer and an inner compartment, the former containing two large huts, each about fifteen feet in diameter, with neat mud walls about three feet high, and a lofty conical roof. These two huts serve as a dwelling-place for the master of the house. The inner compound, or harem, contains six smaller huts. The whole arrangement is really curious, especially here, where the ground is not swampy, and where termites are only seldom found, so that there appears to be no real reason for such a method of housebuilding.

The station of Bufi consists of a collection of such buildings, those occupied by the Danagla differing only by their greater filth from those of the rest of the population. Each building was originally surrounded by a bamboo fence, but these are for the most part broken down, which is strange, for here leopards carry off people in the day-time from out of their houses, as we had an opportunity of witnessing. To each homestead belong small gardens, in which are grown maize, bamias, onions, a species of white bean, and egg-apples (*Solanum melongena*); cotton appears to flourish here. The tomato has not yet found its way here, but I saw bananas, lemons, and bitter oranges, and the papaw-tree, which I had brought with me from Ugánda, had spread from station to station as far as this place. The plants cultivated in addition to those just named are the usual species of grain, sweet potatoes (with red skins), as well as the *mlokhia* (Corchorus) which always follows the Arabs, Gynandropsis, *Hibiscus cannabinus*, &c. Here at any rate a great deal could be done in the way of agriculture, as water is plentiful and the people very numerous. But unfortunately the slave-trade has been in full swing here, and no one thinks of using his existence for any other purpose than to rob, to plunder, and to deal in slaves.

The river, which is called by the natives, Doghúrguru, makes a great bend near the station, and then assumes an almost due northerly direction. After flowing through the Bufi district, it passes through the country of the Kīch, a division of the Dinka, including the Jemid, Lau, and other tribes, and is known there by different names, such as Nam-Lau (the river

of Lau), &c. Farther to the north, where the districts of the Atot, the Kīch, and the Elyáb border upon each other, it separates into two arms, which flow round a large island, that during the *kharīf* is intersected by many small canals and swamps. All the cattle *zerības* of the neighbouring Dinka are situated upon this island. The eastern arm of the river, upon the right bank of which the village of Lau, or Lao, is situated, and which has to be crossed when going from Shambé to Ayák, is called Goll by the Dinka. The westerly arm is named Gōk. Farther to the north, both arms join and enter the Bahr-el-Jebel near Fauvér. The river is bordered by large, almost impassable swamps. These swamps, as also the river itself, are often perfectly dry during the dry season, so that water is only obtained by trenching. Lwal, or Elual, which is marked on Pruyssenære's route, is only known here as one of the numerous swamp troughs.

The shameful slave-trade here causes me so much work that the days often appear to be really too short; in three days I have sent one hundred and eighty slaves from the suburbs of Bufi to their relations or to their chiefs, and even yet chiefs from the Mandari mountains are arriving here to reclaim their people. In performing this work, it is impossible to rely upon the least help from the officials of Bufi. A passive opposition to everything that I order makes all beneficial work almost impossible. No one will move a hand to help; to everything I say they answer "Yes," but at the same time remain sitting upon their *ankarebs;* and all this one has to bear in the face of the complaints of the oppressed natives, and in view of the complete devastation of the country!

Nyamusa is the name of this district, which is inhabited by the Bufi tribe. Gonge lies to the north-west; Mólo, which is said to have a language of its own (not Dinka), to the north; Mundár, or Mándari, where Bari is spoken, lies to the east; Wīra, or Vira, to the south; and the Morú, erroneously called Mádi by their neighbours, live to the south-west. The language spoken by the Bufi Negroes cannot readily be classed with that of any of the neighbouring tribes, the numerals being entirely different; but in all the languages and dialects of the tribes living in this neighbourhood so many analogies are to be

found, that it is impossible to doubt that they spring from the same root. It is, however, surprising to find the indisputable relationship between the language spoken here and the Mádi language spoken to the south of the Bahr-el-Jebel, and it is impossible to avoid coming to the conclusion that all these small peoples and tribes originally dwelt far to the west, and were then driven towards the east by a migration of tribes from the west, to be at last driven asunder and scattered, as by a wedge, to the localities in which we find them to-day. That all these movements have caused changes in the language is only what might have been expected.

Although Dr. Schweinfurth accuses the Monbuttu women of being rather lascivious, it nevertheless appears that their attachment to their husbands and their sense of family ties are not thereby decreased. I have mentioned that Gambari, the chief of the Monbuttu district of Kubbi, had been detained in Dem Suleiman, in the Bahr-el-Ghazal, on the charge of having made and sold eunuchs. Now, it is perfectly true that eunuchs were made and sold in Monbuttu, but it is just as certain that the offenders were two Danagla—Beshir Salah and Saleh Hakim—and when they were accused of it, they tried, according to the usual custom here, to put the blame on "Abd" (slave) Gambari. During his absence from his district, the greatest disorder prevailed; the opportunity was taken to rob and plunder in all directions, and to send whole convoys of slaves to the so-called *mudirič*, Gurguru, *i.e.*, the old district of Rōl. Children were stolen from their parents, to be sold at last for a bottle of brandy or a pair of old trousers. All this is best proved by the number of Monbuttu (two hundred and fifty) whom I have already released and sent back to their homes.

At midday, the proper time for paying a visit, I was surprised by the arrival of a lady. Ungauna, Gambari's chief wife, had come all the way from Monbuttu, intending to go to Ladó, to request me to liberate her husband. She had, however, heard upon the way that he was at liberty, and with me; she had therefore hurried here, through Makraká, to see him, and she now came to thank me. She was of middle height, rather stout, but although she was very dark, a yellow under-tone shone through her skin, and, like all the Monbuttu, she had

very beautiful and well-kept hands. Save for a girdle round her waist, she was perfectly nude. In her right nostril there was a highly polished iron nail with a broad head, and with this exception, she wore no ornaments. Her frisure was, on account of the circumstances, dressed in the fashion in vogue here, and her chignon was transformed into a number of curls and rolls, which reached down to her shoulders. It was delightful to see with what ease she entered my hut, took a chair and sat down, whilst the dragoman, her brother-in-law, who accompanied her, was obliged to stand. It is very easy to recognise the different social positions of the women here by their behaviour.

4. From Bufi to Rumbēk.

KÉRIMU—A BAND OF MUSICIANS—BUTTERFLIES—PONCET'S OLD ZERÍBA—THE YALO CATARACTS—FERTILITY OF THE LĒSI COUNTRY—PILE-DWELLINGS OF THE LOFI—CHIEF DOJERA, A HERCULES—THE AGĀR COUNTRY—AYAK A NEST OF SLAVE-DEALERS—THE ANIMAL WORLD—FORDING THE YALO.

We had to march for about a quarter of an hour up-stream before reaching the ford, where the "good road" was said to begin. The water there only reached just up to the breast, so that the passage of the river (260 feet broad) was accomplished with considerable rapidity. The road then led over a difficult stretch of stiff mud, which could not be passed without considerable disarrangement to the toilet; this was followed by the swamp of Túnjuru, which was covered by high grass and stretched out to a distance of nearly a mile on either hand. The muddy gutter through which we waded was very deep in some places, and caused many an amusing scene. After passing through some cultivated land and by a number of isolated homesteads, then through several swamps and swampy *khors*, the road led over a monotonous district covered by steppe wood or acacia bushes, until we reached a welcome resting-place near a large mass of gneiss. Although an extensive view is obtained from the top, it unfortunately provided nothing of interest with

which to enrich my sketch-map. The short turf was here completely covered with the excrement of the *Sciurus* (*Xerus*) *leucumbrinus*, which, after being powdered, is used to heal old wounds, for this squirrel feeds upon all kinds of aromatic bulbs. This custom reminds me of a practice which obtains in the south Syrian desert, where the excrement of certain gazelles is used in the same way.

From the Mámvolu peak—for such is the name of the mass of gneiss just mentioned—the path followed a sinuous course until, after passing the road which leads direct from Amadi to Ayak, it suddenly turned to the south, and then branched off to the west, over stony, gently rising country, until it reached a small village named Kérimu, which lies in the midst of dokhn-fields. As the name Kérimu is also given to the whole district surrounding the village, I think I am justified in assuming that this is Petherick's Kirmo, and if so, our routes here join one another. Chief Atoti, who resided here with his wives, received us in a very friendly way, but he was not in a position to offer us a drink of water, as the springs are said to be very far away, and he therefore requested us not to camp at his village. Kérimu is small, and surrounded by rich tobacco plantations and beautiful high Anogeissus trees, which are called here, as in the Dinka country, *amēd*.

A curious band of music had taken up a position at the foot of a stately tamarind. A young man blew an immense horn constructed of long gourds; by increasing and diminishing the size of the sound-hole, he was able to modify the notes which he produced; they sometimes resembled the trumpeting of an angry elephant or the roaring of a bull, or sometimes the soft purring of a great cat. He was accompanied by a friend who clapped with wooden staves and sang a monotonous song. We set off, headed by this music, and I am even now amazed when I think of the lungs which were able to go on blowing incessantly over the long uneven road.

The steppe became much more stony from this point. Many nodules of ferruginous clay, black as coal, lay in the red sand. A diminutive fly, called by the people *dubanet-el-fil*, *i.e.*, elephant's fly, is one of the plagues of these grass steppes. I found it more impertinent than any of its species, and it dis-

played an intolerable preference for the corners of the eyes and the nose. If it is crushed between the fingers, a strong smell of honey remains. There are also two other species of flies which are very common. One is like the common European blue-bottle, the other is a large ash-grey species. Butterflies are also seen in great quantities, from the large Eques species down to the almost invisible moths. The most beautifully coloured species I have yet seen is undoubtedly a small green Zygæna, which, being coloured purple silver and steel green, shines like a spark of fire. Unfortunately, I had no insect pins in my possession.

At midday we arrived at a point where the ridge of hills running along the river is touched by the road, and a few minutes later we came upon the river itself, which has exceedingly high banks, but we left it almost immediately. The path branched away between the hills, and was rendered difficult by the presence of crevices and very deep rain-gutters, as well as thorns, especially those of the Randia, which were more numerous here than elsewhere. After about an hour's exceedingly difficult march, we again reached the river-bank, which was about twelve feet above the water, and descending which we arrived at the ford. The current presses upon the steep eastern bank. The river is exactly one hundred and eighty-seven feet broad; in the middle large blocks of stone were lying, and the water reached up to our waists. The river is called the Yalo, both by the Bufi and the Lēsi, but farther to the north the Dinka call it Gēl. The west bank, which has only a gentle fall, is often flooded, and here, close by the river, is a high tree, a Diospyros, on account of which the ford is called Patokōme (Meshrat-el-Jogān). *Jogān* is the Arabic name for the Diospyros, the sweet fruits of which are freely eaten everywhere. Mohammed Mismar's small *zeríba* lies about ten minutes upstream; he lives there alone. Five minutes to the west is the place where Poncet's *zeríba*, Mvolo, once stood, and this name is retained to the present day. The name Moffa, which has been given by Junker to the place, is the name of the chief of a village near to it, and the word Lēsi, which is commonly applied to the small *zeríba* here, is really the name for the district, and for the small tribe which inhabits it.

From the top of the groups of rocks which are scattered about, and which Dr. Schweinfurth has very well depicted, a ridge of hill was seen in the north-north-west. It was probably the mountain named Gurken by the Sofi, and Dokávuru by the Lēsi. The Hyrax and graceful squirrels still play upon the rocks, and the Ptilopachys pair in the surrounding fields. The old *zeriba* has vanished, and in its place are luxuriant corn-fields. I shall, however, build a small station here, and willingly spare five soldiers for it.

After rather more than half an hour's march, we arrived at the cataracts of the Yalo. The river, which is surrounded by magnificent vegetation, is divided here into three arms, separated from one another by islands, formed of a chaotic agglomeration of rocks, over which it is very difficult to climb. The name of Damlába Manúfo, *i.e.*, the Great Rapid, is given to the easterly branch of the cataract; the number of fish it contains is quite marvellous. On the road we had already seen many people laden with fish twenty-four to forty inches long, which gave no very agreeable perfume to the air. The ground was covered with fish scales and bones, the remains of many suppers, for the natives often fish here all night long. Even the rocks are spotted white all over, an evidence of the presence of large numbers of fish-eating birds, the most important of which are herons and *Haliaëtus vocifer*. More than twenty men were standing in the roaring rapids, the water being up to their waists; the circular nets are stretched over rods and simply let down into the stream and drawn along against the current, to reappear immediately with three or four fish. The principal fishing season is in November and December, when the river falls. Most of the spoil are fish of prey which follow the lead of swarms of Chromis. Many Sanseviera grow upon the rocks, as do bushes of *Tinnea æthiopica*, which were in bloom when we passed, and the ground was covered with the orange-yellow prickly fruits of the *Cucumis Tinneana*.

The district inhabited by the Lēsi tribe appears to be very fruitful, to judge by the cultivation. Besides the usual species of corn, Hyptis, Voandzeia, and ground-nuts are cultivated. Hunting must be extensively carried on, and with much success, for we noticed great numbers of pitfalls in the high

grass. The women are very ugly, and disfigure their lips by the insertion of wooden discs or cones of quartz. Very delicately made iron chains are much worn, and a curious product of this country is seen in the pipe-bowls made out of red clay in exact imitation of Egyptian patterns, which have been introduced here from Khartúm. A yellow clay found here is eaten; it is said to aid the digestion of fish, and also to take away the smell of fish from the hands. The Dinka use the strongly aromatic leaves and flowers of the *Hyptis spicigera* for this latter purpose.

A damp grass steppe, strewn with many masses of gneiss, between which doléb bushes grow, led by a gentle fall from Mvolo to the river; after the rapids the latter passes into the lower plain, to which the cataracts serve as steps. Whilst near the station the Yalo flows due north, at the ford we crossed it makes a bend to the west-north-west, and there it was one hundred and thirty-four feet broad and thirty inches deep. The bed was sandy, and bordered on each side by enormous growths of grass. To the left of the road we followed after fording the river, we came upon many old channels, which were frequented by hippopotami, whilst herons and Sarciophori were busily engaged in catching worms on the muddy banks. Amongst the dokhn-fields and steppe-wood, in which patches of red sand were strewn with gneiss rubble, there were frequent strips of swamp nearly always formed by small *khors*, which were very difficult to cross. The whole of this small district, which is named Dúgwara, or Dúgbara, belongs to Chief Agaï. His village was just being removed farther to the south. A group of Anogeissus and Solanaceæ, in the middle of the savannah which adjoins this village, marks the place where the village of Ruku was once situated. We were joined here by the two sons of the late chief, A-uri, armed with large wooden clubs and broad-bladed buffalo spears; they had full beards and very beautifully made iron bracelets. It is curious that all the people here chew tobacco.

At Ruku we entered into the Sofi district, where the language differs considerably from the Lēsi idiom, but is identical with the language spoken in Bēli, to which I shall subsequently refer. The country had here a very wintry aspect; in many

places the grass had been burnt down, and red sand-patches stretched out before us, blackened by ashes and charcoal. In some places, also, we noticed grass stubble which had been left standing, and masses of yellow withered leaves scattered over the ground or still hanging to the twigs of trees.

A sudden rainfall compelled us to camp in the small village of Joro, the huts of which occupied a small clearing in the wood. Some of them were built upon the ground, others upon platforms. The space underneath the platforms is much sought after on account of the shade it provides, and all house-work is performed there. The men also assemble there to chat with the women, who, as in all Mittu tribes, possess a considerable amount of independence. I again noticed the lip ornaments, the quartz cones, as well as the formidable naked knives hanging to the waist-belts of the women, who were all nude and very fat. A small hill, Dogrupatara, about 150 feet high, lies near the village. On climbing it I obtained a view of high rolling ground and a great number of small mounds and rocks. The course of the Yalo, with its western bend, was also well seen. The most noteworthy heights which caught the eye were Jebel Gurken (Dokávuru of the Lēsi) and Jebel Khartúm, which had been noticed by previous travellers. The former of these mountains is a slightly extended range of hills, about 250 feet high, having, especially upon its northern side, conspicuously bare cliffs. Jebel Khartúm, or, to give it its proper name, Jebel Nyedi, is a hilly plateau; it is called by the Lēsi, Dobrato.

On returning from my walk I had the unexpected pleasure of catching a specimen of the mole-mouse (Georychus), which appeared to be taking its evening promenade, and by whetting its teeth against one another and softly hissing, it prepared to defend itself. Its very small eyes were at the same time completely shut, giving a peculiar appearance to its large head. The little animal, with its ornamental silver grey fur, the white spot upon its forehead, and its soft hair, is very attractive. It comes far oftener into daylight than the mole, which it appears to replace here.

The huts of the village of Rengo, which lie at the foot of Jebel Nyedi, differ somewhat from others by having the points

of their roofs decorated by star-shaped straw bundles. The wealth of this district in cereals is very great, especially in sesame, which we saw being hung up to dry; it is on this account that the Danagla have established *zeríbas* here, which form a great emporium for the slave-trade.

The nearer we approached the hill, the more stony became the ground and the more sparse the growth of plants. The masses of rock between which we passed, and which formed the hills, were mostly completely bare, and scorched by the sun. It can easily be understood that in such a district the natives were able for a long time to successfully withstand the inroads of the Danagla. The descent to Dolla led through high grass as far as the black alluvial bottom-land, where stalks of durrah, often more than two fingers thick, shoot up to the height of twelve feet. Dolla is a large village, with many pile-dwellings; it belongs to the district of Jirri, which name Petherick gives to a village. The men's straw caps reminded me of the southern Nyam-Nyam; broad-bladed spears and weighty wooden clubs, like those of the Dinka, constitute their arms. In spite of their ornaments of fresh foliage and masses of iron ornaments and lip plates, the women are, I think, the most ugly that I have ever seen. Large beehives of the usual shape hung on all the trees, the production of honey being very large. The wax has up to the present been thrown away.

In the open steppe wood, which extends as far as the small village of Ngorre, there were hundreds of small mushroom-shaped habitations of termites made from the thick grey clay. The high red structures of the *Termes bellicosus* are hardly ever found on such ground. The village was completely filled with small fish, laid in the sun to dry, and giving out an intolerable stench, which, however, did not seem to affect the Negroes. A group of high doléb palms marks the situation of Moddo-beri, the residence of Dojera, the chief of this district. He was a man of herculean frame, and very well proportioned. The form of his face, his expression, and his large beard gave him the appearance of a Nubian. Report says that he once killed a buffalo with a lance, and a sight of him makes it easy to believe. Hospitality does not seem to be well understood

here; no one aided us in the construction of our huts, nor even provided us with water. I may mention, however, as a partial excuse for the people, that water was very scarce through the stretch of country we had just passed, that the villages are usually situated at a considerable distance from their water-supply, and this village, moreover, had only recently been occupied. We marched over sandy, reddish-brown soil, covered with nodules of iron, in the direction of several large rocks, which lie on a kind of open plateau free from all grass, and where we saw the remains of the huts of former travellers. Those of the inhabitants who speak Arabic call this locality Hajr Abdu (the stone of Abdu), after a former official who was stationed in Mvolo, but the natives call it Dolille Finnu.

From this point the district inhabited by the Dinka tribe Agār commences. At a distance of some ten minutes to the side of the road there is a mound, entirely covered with fragments of stone, above thirty feet high. Deep holes are dug round its base, from which the natives obtain very brittle stone, sometimes red and sometimes white in colour, and greasy like tallow. The powder made from the white stone is rubbed into the skins that cover the big drums, and is also used to paint the huts and the cheeks. The red stone, which is sometimes almost purple, is mixed with the fat obtained from the butter-tree, and then used for anointing the body. This hill is called Dugfala (hole) by the Sofi and Lēsi; the Agār word *ván* has the same meaning. At the base of the hill, the difference between the red soil which composes the hill and the light grey loamy soil of the declivity is very sharply marked. A great number of Agār had come to meet us here, in order to express their joy that a Government had been installed, and that a new and, we will hope, improved era had begun for this oppressed country. A number of the common petunias were in flower along the road; they are here lilac-coloured, whereas to the south they are usually white. Many really colossal trees give a park-like character to this district. Unfortunately we saw, too, the ruins of many villages which had been burnt down, showing that this region had not escaped the devastations of the slave-dealers. In the station of Ayak more than three hundred slaves had just been sent away to their relations and

chiefs, by their so-called masters, from fear that on my arrival complaints would be made to me. For over an hour we wandered along in the midst of corn-fields, with their small watch-huts, until at last we were greeted in a clearing by a long row of about two hundred well-armed Danagla, an indication that we should find an immense number of slaves in the station. My small company of soldiers (ten men) formed a comical contrast to the forces of the Danagla.

The station is called Ayak. Dufalla, or Defa'allah, as it should perhaps be called, is the name of its Governor, a scamp of the first water, distinguished even in this respect above his fellows: Koran in hand, he plunders far and wide. The situation of Ayak, between Shambe, Rumbēk, and Amadi, would especially fit it to be the capital of the entire district, and it is impossible to understand why Rumbēk, where even water can hardly be obtained, has occupied that position hitherto.

The environment of Ayak is gloomy in the extreme. The trees have been cut down, and a rolling plain covered by grass extends on all sides. The soil is a sticky yellow loam, and it would seem to be often flooded, to judge from the great pools of yellow water which even at this season we saw in the fields. The river, which makes a sharp bend close by the station, is one hundred and nine feet broad at the southern ford, and varies from four feet three inches to four feet eight inches in depth. The banks are at present about fifteen feet above the level of the water, and consist of pure reddish-brown sandy clay unmixed by stone; in fact, not a single rock or stone is to be seen as far as the eye can reach. The station itself consists of irregular congeries of huts and *zeríbas*, mostly built on high platforms; but as many people have also settled upon the ground, it occupies a considerable area. Very few gardens are to be seen, for the people here can think of nothing but slaves. If, however, proper canals were dug and irrigation employed, much might be expected here. The population consists of the scum of Khartúm, Berber, Dongola, &c. The men who were too lazy to work or could not exist there came here and built huts, where they live, with their wives and servants, at the expense of the Negroes. In round num-

bers, and not counting slaves or other appendages, I suppose there are some three hundred of these parasites; and if we add to them their slaves, four for each man, as the lowest calculation, there are about fifteen hundred who live upon the natives. Under such conditions, although the country produces a remarkable quantity of corn, sesame, sesame-oil, fat from the butter-tree, wax, ground-nuts, &c., it is not to be wondered at that we heard from the natives many complaints of hunger.

After all the disgust which I feel when writing of the state of affairs in this place, it is quite a relief to turn from that subject to the fauna and flora of the surrounding country, which, however, is not very rich. Hundreds of lizards climb about the huts, the hedges, and all the old tree-trunks, hunting the numerous flies and spiders which infest the place. The lizards appear to have been infected by the reigning love of plunder, for they fight and bite each other's tails off. A small python about five feet long, which I received as a present, and which has become tame very quickly, greatly terrified my servants, whom nothing would induce to come near it. The horned raven (*Tmetoceros abyssinicus*) stalked round me, and often allowed me to stroke its head. It was the sworn enemy of two zebra ichneumons (*Herpestes fasciatus*), which, with the curiously droll impudence which characterises these little beasts, snapped away all tit-bits from him. In comparison to these creeping parasites were several splendid examples of a lemur (*Otolicnus galago*), which is very common here, and becomes very tame when well treated. They are delightful little creatures, with their large umber-coloured eyes. After waking from sleep in the evening, they came and washed in the water-pot. Civets and genets are said to be common, but I could not obtain any. On the other hand, a nice specimen of the caracal (*Felis caracal*) was brought to me.

As soon as we had left the river and turned in a northerly direction, we passed through the extensive corn and lubia fields which surround Ayak. We then reached grey loamy soil, which is often inundated, and noticed on high patches, where the soil is partially mixed with sand, a luxuriant growth of ground-nuts. Although this plant is cultivated to a great extent by the Agār, no one has ever thought of utilising the

oil which is obtained from it, for any other purpose than that of anointing the body. The people believe, of course incorrectly, that the oil of the ground-nuts would be injurious to eat, but that the sesame-oil is wholesome. All our porters carried with them packets of ground-nuts neatly wrapped in leaves.

After marching an hour and a half from Ayak, we arrived at the ford of the river, which flowed between steep sandy banks about ten feet high; it was sixty-five feet broad, and from three to five feet deep. The river is bordered by very uneven ground, with deep swampy places full of water and mud. It took us half an hour to pass through this, after which we came to a small patch of short grass, followed by extensive fields of durrah and dokhn, alternating with grass steppe. The district on the other side of the river is called, like the principal village, Ferial, but a river Ferial or Welle does not exist here. If one may judge from the extensive cultivation, the number of people we met on the well-trodden paths, and the numerous *zeríbas*, this country is very thickly populated, and is exceedingly productive in corn, sesame, and tobacco. The *mashirr* of Ayak (*Nicotiana rustica*), as well as very large gourds which are used for jars, are much sought after and prized throughout the whole district of the Bahr-el-Jebel. In the corn-fields surrounding the village of Maléḱ, which we left to our right, were a number of quails with their young, probably the *Coturnix Delegorguei*, for the *C. communis*, which is very rare here, would certainly have no young at this time. Just behind the village lay the swamp of Warrafán, which is never dry.

After a four hours' march, we rested under a group of butter-trees, which provided us with shade from the burning sun, and where we received presents of water from the Agār chiefs living in the neighbourhood. From this place a long march through corn-fields, villages, and patches of ground scorched by the sun, led to the wells of Miënval, which were in the middle of the road; they were about ten feet deep, in thick, light grey loam, and contained very dirty water of a milky colour. With a little trouble, however, it would be possible, by deepening the wells, to get better water, and that this is not done shows

the indolence of the people. When they go along the waterless stretch to the market at Rumbēk in the winter, the dry season, they have no need of water; and in the summer, the rainy season, there are pools enough from which they can drink.

Many mosquitos were found near the water, and it was perfectly astonishing to see the immense quantities of earwigs (*Forficula* sp.), of a species having an orange-coloured thorax with a black stripe. On entering an Agār hut you are literally covered with these Orthoptera; the high grass also is perfectly alive with them.

The boundary between Afin and Atoï, two of the small strips of country into which the Agār territory is divided, was situated at two and a half hours' march beyond the well. The cattle in this district were estimated at between five and six thousand. The district of Montij was characterised by its thicker woods. Large troops of baboons were met with here; they were taking their breakfasts, and hardly took any notice of us. A spot called Lermé, behind the village of Afiati, was pointed out to me, where a village with all its inhabitants, who were at the moment singing and dancing, was swallowed up by an earthquake. A very pleasant march through wooded country and amongst many villages, brought us at last to the station of Rumbēk, the principal settlement of the Danagla in this country. It has been inhabited by them for many a long year, and I shall probably find a considerable amount of work to do before things are as they ought to be.

5. Rumbēk: the Agār and other Dinka Tribes.

RUMBĒK AND ITS HISTORY—THE AGĀR TRIBE—MATRIMONIAL BARGAINS—WOMEN'S RIGHTS—ADMINISTRATION OF JUSTICE—DRESS AND ORNAMENTS—DOMESTICATED SNAKES—A PARIAH TRIBE—SUPERSTITIONS.

Rumbēk, the capital of the district of Rōl, was first occupied from Gabba Shambé by Alfonse de Malzac, an *attaché* to the French Consulate in Khartúm, and a slave-dealer of repute.

It received its name from that of the chief of the district. After Malzac's * death it was purchased by Binder, a Transylvanian, and subsequently passed through the hands of Halil Shami, Tóhami, Ghattas, until finally it became the property of the Government, whose authority, however, up till the time of my arrival has only been a nominal one. This place, originally erected for elephant hunting, became after the lapse of years the centre of the settlement in this district, and the starting-place for the caravans *viâ* Amadi to Monbuttu; it was also the collecting-place for the ivory, both white and black, obtained by these caravans; and lastly, it provided an asylum and free quarters for all idlers and scamps from the various Danagla settlements throughout the Sudān. Its rise was facilitated by the dense neighbouring population and the luxuriant corn-fields. At the present time the station has a very uncomfortable look, owing to the former attempt to construct a moat round the station, and the numerous trenches in the yellow clayey soil, from which clay has been taken to plaster the walls of the huts and to form the floors of the platforms. Besides this, wells were constructed by means of a row of deep holes, which the rain during the *kharīf* has deepened in some parts and destroyed in others, so that you can now almost imagine that you have come upon a colony where gold-diggers have been at work. In the midst of this chaos of trenches, mounds, and pools, the station buildings form a kind of island. They consist of a motley group of huts built upon platforms, the irregular arrangement of which defies all description. Paths about a foot broad, and covered by every kind of filth, lead through this confusion; and as the spaces underneath the platforms are occupied by crowds of slaves, who live after their own manner, the stench and dirt are prodigiously increased. Hardly any one has thought of fencing in his house, so that every one can see into his neighbour's dwelling, and if any one quarrels with his concubine every one in the station can see and hear. In one corner a kind of

* M. Alfonse de Malzac died at Khartúm in April 1881. Lejean ("Les Deux Nils," pp. 19, 77, 99) calls him a monster of iniquity, but a good botanist; Heuglin (Petermann and Hassenstein's "Inner Afrika," p. 99) refers to him as "a slave-hunter of the worst type."

garden is situated, the trees of which—dates, lemons, and pomegranates—planted by Malzac, were half withered, owing to want of pruning and water. Water is very scarce; it is obtained from deep wells, and has a dirty colour and a nauseously earthy taste. The whole situation of the station so far from all water is a great mistake, and its formation into a central station can only be explained by its convenience for the slave-trade. In one day I set free and sent home 165 Monbuttu, of whom 41 were taken from the hut of the chief of this district, a certain Mula Effendi, of course a Dongolaui, and 400 Agār, Kīch, and Atwot (Atot) slaves; these numbers are proof sufficient of the state of matters. In Rumbēk there is no lack of places for prayers, decorated by white flags, and still less of *fakīs*.

The Agār, who live round the station, are a curious people, and although a good deal has already been written concerning the Dinka, of which they are a division, it may not be out of place to devote a few words to them. They are polite and complimentary to excess, and so self-conscious that not one of them would ever eat with a Mittu. Although the Khartúm settlement has existed here for more than twenty years, it is almost impossible to procure any porters from them. They still possess a considerable quantity of cattle, notwithstanding the numerous raids and thefts to which they have been subjected. Slavery has, however, been introduced among them, and with it the demoralising use of brandy, that distilled from dokhn, which is very strong, and contains much fusel-oil, being accorded the preference. These are the results of the civilisation introduced by the twenty years' residence of the Danagla amongst them.

In their habits and customs the Agār have remained completely unaffected. The girls go about nude until they marry, even if this event does not happen for many a long year. Whoever touches the breast of an unmarried girl must pay the usual cows and marry her; if he refuses to marry her, he must at any rate pay the cows, and she must wait for a husband, who can obtain her at a smaller valuation. At the time when cattle were very numerous in this country, the price for a good-looking girl was fifty or sixty cows; now eight or ten

are sufficient, and if the people are poor, double the number of sheep and goats will suffice. Rich people will only give their daughters in marriage to men who possess cattle, and so they form a kind of clan, bound together both by relationship and similarity of interests, to aid each other in case of any attack.

If a man wishes to marry, he speaks in the first place to the father of his choice, and after a long discussion, at which all the relations of the bride, from the grandfather to the female cousins, take part, the price which is first asked—a hundred cows—(I speak of well-to-do people) is at last reduced to about forty, of which each of the relations receives a share. As soon as the price has been paid, the male relations of the bridegroom ornament themselves with aprons of leopard skins, all kinds of fantastic head-dresses, and weapons, and accompany the well-anointed bride, with song and dance, from her father's hut to that of the bridegroom, where a feast is held, for which the bridegroom provides an ox and the necessary beverages. The next day the bride's father gives a feast, on which occasion, as an act of generosity, he usually returns ten of the cows paid by the bridegroom for the bride.

The Agār never permit the girls of their tribe to marry into another tribe, but they themselves sometimes marry Mittu, Sofi, and Bēli girls, who can be obtained rather cheaply in exchange for iron shovels or goats. It often happens that a young man who is too poor to provide the requisite number of cattle agrees with a girl to elope. If, however, they do so, they are obliged to hide themselves carefully, for should they be caught by their relations, the man, unless by any means he manages to ransom himself, would be immediately killed, and the girl taken back into her father's house, to be subsequently sold at a diminished value. As a rule, however, matters are arranged by the relations on either side to their mutual satisfaction. Repudiation on account of sterility occurs but rarely, and in such a case half the cattle paid for the girl has to be returned. It is more common on account of adultery, in which case the guilty party is condemned to death or to the repayment of eight cows. Every woman has the right, should she be repudiated, to take all her children with her, and to take a milch cow for

the support of each child. Men, however, who are rich and influential enough to set aside this custom often retain the children. If sons have been taken away by the mother, they may, if they choose, return to their father as soon as they are grown up; the girls, however, remain unconditionally with the mother, who, if she marries again, takes them to her new husband.

Births are not specially celebrated, and there are no ceremonies of purification employed. Twins bring misfortune, and require the sacrifice of a goat. At the birth of twins the people rejoice if one of them dies, as that is supposed to prevent misfortune visiting the parents. Special names for twins do not exist. The navel-cord of a newly born child is divided by seven sharp straw splinters, and a few drops of the blood are placed upon the mother's tongue, in order that, should she later on use hard words against her child, they may have no evil effects. The father may get angry and curse his children if he likes—his words have no power of producing evil.

The murder of a man must be atoned for by a fine of thirty cows; that of a woman by forty cows. After a death, the body is washed, shaved, rubbed with oil, and then put into a circular hole in a squatting position, with the hands drawn up to cover the mouth, all ornaments having been taken off. A cow-hide is spread over the corpse, and the hole is filled up with earth. If the deceased was a rich man, a cow-hide is also placed under his body, and an ox is killed, generally a diseased one, and eaten by the relatives. The nearest relations shave the head as a sign of grief. For six or seven days the deceased's hut and those of his family are considered unclean, and avoided by all but those who live in them; the neighbours do not even fetch fire from them.

The men do not wear any clothing, but have the following ornaments:—small aprons of brightly coloured skins, which are only used on festive occasions, head-dresses made out of skeins of wool, ostrich feathers, and straw caps with Galago skins. The bracelets are of ivory or iron, which the Agār work, but more commonly barter from the Mittu and Bongo. The women are enveloped in large skin aprons, often beautifully ornamented with beads. The tribal marks of the Agār and Atwot are four scars running parallel across the forehead,

as well as the removal of the four lower incisor teeth and the two canines.

The Agār are armed with two or three long, very broad-bladed spears, which have no barbs, heavy throwing sticks or clubs, and a large buffalo-hide shield. The Atwot is the only Dinkā tribe that uses arrows. Formerly in hunting elephants the people only used the spear; now, however, pitfalls are employed, as well as weighted spears hung to the branches of trees, as is customary in the south.

The articles of luxury employed are, in addition to brandy, the usual *mrissa* and a drink named *um bilbil*, which occupies a position between brandy and beer; also tobacco, which is carried in small packets hung on the arm, and chewed. Plugs of tobacco are carried behind the right ear.

Dr. Schweinfurth has already mentioned the many small snakes which inhabit the straw roofs of the Dinka huts, and which generally live on very friendly terms with the master of the house. The great *Python africanus* is very common in the whole of the Agār district, and one of these fine snakes may be often seen as a privileged inmate in the huts of this tribe. It is the women especially who form friendship with them; they sometimes rub them with fat, and even pour small quantities of fat down their throats. The Agār chiefs told me that the snakes are so much at home that they will never think of touching a goat or a sheep belonging to the people with whom they live, even if they are very hungry, but will go hunting far off into the forest, where they sometimes pay their friends a visit, and are always welcomed.

Of the various Dinka tribes, the Nuēr and the Atwot speak the same language, which differs considerably from the true Dinka; whereas, on the other hand, the Rēk, Mōk, Gōk, Agār, Alwāj, Elyab, Kīch, and Bōr speak exactly the same idiom.

In this family a very peculiar and isolated position, like that of a pariah caste, is occupied by the so-called Derr, people of a very dark skin, of middle size, and well-set bodies, who wander through the dry land between the Kīch and Elyab, sometimes associating with them, sometimes with the Atwot. They are hunters, possessing no settled dwellings or villages,

a well would have taken up too much of our time, we continued our march without making a halt.

At this spot the Mellan district, inhabited by the Bēli division of the Mittu, is wedged in between the territories of the Dinka. On Junker's map the Mittu are called Bēli and Balma. Balma, however, or rather Balima, means "my friend" in the Bēli language, and the Danagla, when they first came to this country, heard this word so frequently that they applied it to the whole tribe. Just in the same way the Bari became known as Gillio or Yulio, which also means "my friend."

Strange to say, we encountered numerous coveys of rock-fowls (Ptilopachys) in the steppe-woods of the Bēli country, although these birds ordinarily inhabit only stony regions. The boundary between the Bēli and the Gōk, a Dinka tribe, is formed by a small Anogeissus wood, beyond which we entered Fedwin, a district of the Gōk.

The *khor* in front of us floods its banks to a distance of three-quarters of an hour's march on either side. I noticed that many loam walls had been erected for catching fish. Khor Gulmar, where we camped for the night after an exceedingly hot march, has also a very broad swampy bed; the stream flows slowly to the north, and contains excellent cold water. In the rainy season this *khor* is sometimes very difficult to ford, and it sends a large quantity of water into the sandy flats of the Nuēr district, in which it is said to lose itself. Even in the driest season large basins containing clear, good water are always to be found. Fannegaï adjoins the district of Fedwin; it has a rather moist soil, and a correspondingly luxuriant vegetation. Acacias, strange to say, are totally wanting in this district, but dolébs are very common.

The districts of the Gōk are smaller even than those of the Agār; we therefore arrived at an early hour at the station of Jōt, the chief village of the district of the same name, which is generally, however, called Zeríba Mukhtar, after the commander of the station. It forms the frontier post towards the Bahr-el-Ghazal district. The Gōk have the same tribal mark as the Atwot, viz., several scars radiating from the glabella, and their language, customs, and arms are exactly like those of their Dinka brothers. They are celebrated as the best and bravest

of Dinka warriors, and it is said that one Gōk can drive ten Agār before him; they therefore call the Agār, in scorn, *Tirem* (useless.) The Dinka are the only Negroes in our province among whom women are allowed to milk the cows. The clean *zeríbas* of the few Danagla settled here are surrounded by high stockades made of split bamboo, over which there climbs a white flowering, strongly smelling bean, which has been introduced from Khartúm. Two kinds of large gourds are grown in the corn-fields, of a different species from those seen in the south; the one is round, the other four-cornered, with a reddish sweet pulp. The people here (Danagla) appear to live on a good footing with the surrounding natives, to judge from the fact that as soon as we requested porters they immediately appeared; so we were able to utilise a moonlight night to cross the waterless stretch which lay before us. Although such night marches are pleasant on account of the cool air, they are usually followed by fever, especially if several night marches are made one after the other. Therefore, people who are strangers to the country will do well to use caution.

Throughout the district of Jōt, into that of Ayell as far as the borders of the river Roā, there stretches a plain, broken here and there by beautiful thickets. Two hours and a half were occupied in passing over the ground, which in parts was flooded by the river. Numerous mushroom-shaped structures made by the termites gave to the country a very peculiar appearance; sometimes whole groups of them were seen. As we approached the river, the road turned sharply to the north, and was bordered by a wide expanse of grass. On the ruins of a cattle *zeríba*, called Abiaï, I noticed flocks of lively plovers tumbling about, and heard the shrill notes of a flock of Senegal magpies and the call of the white-headed osprey. Masses of empty shells covered the muddy ground, over which we could only march slowly, reaching, after five hours and a half, the west bank of the river, where we obtained a well-earned rest.

We camped upon the steep greyish-yellow loam bank of the river, about ten feet above the level of the water. The eastern bank slopes more gently; the bed of the river is sixty-five feet broad, and the water even now reached to the necks of

the tall Dinka. When the river is flooded, the district on either side is covered for a long distance by water, so that at such times the ford would present great difficulties. The river is feared on account of its vicious crocodiles. The number of oysters (*Etheria*) in it compelled us to cross with care in order to avoid their beds.

The district of Abreál begins at the river; it is inhabited by Gōk, and not by Bongo. It is a park-like district, in the middle of which is the station of Lang (the Dinka name for Zizyphus), which is generally called by the natives Gōk-el-Hassan, after its chief. This is the old well-known robber nest Sherifi, as Dr. Schweinfurth calls it, and although Sherif Babekr and Sherif Osman were long ago killed by Abd-es Samat's famous trumpeter, Ingeleri, they took care to leave numerous heirs. Danagla *zeríbas* stretch far and wide over the country, surrounded by the crops of the Bongo, who have settled here, but who, although living amongst the Dinka, preserve their nationality intact. As I only remained one day in this station, and as my time was fully occupied by official duties, I had, of course, little time to investigate the state of affairs here, but the Danagla appeared to be little pleased at my arrival, and held prayer-meetings to hasten my departure.

Very much against the wish of Musa Bey, a very energetic official, we marched next day, and after again fording the river, which had slightly fallen, we returned over the old slippery road to Abiaï. From there we marched along the road towards Jōt, and leaving the road that leads direct to Rumbēk to our left, our path led over open plains covered with thickets and strewn with iron nodules. This circumstance showed that the country was rising. To the right, a sea of grass stretched out for a long distance, occasional large swamps intervening. This grassy expanse extends as far as the river, forming a refuge for numerous hippopotami and herds of antelopes, and in the dry season, after the grass has been burnt, it is the scene of great hunts.

After a short rest we continued our monotonous march. Now and then our road was bordered by swamp, but it led mostly through light wood, and then through extensive

corn-fields, in which were situated the curious pile-dwellings of the Dinka. Balearic cranes were very numerous here, as also the bulbul (*Pycnonotus niloticus*), whose flute-like song I always like to hear. The corn was still ripening; the process occupies eight full months. The dokhn, however, was just being reaped. Numerous baskets for fowls lay about everywhere, for now all over the Dinka country the breeding of fowls flourishes, as the people can always find a ready market for them at the stations. The Dinka consider it so objectionable to eat fowls or eggs, that whoever did so would go courting in vain. Alēl Kuimba (the Kuimba's smelting furnace) is situated at the edge of the swamp, and is a much-frequented camping-place. Many fish belonging to the genus Clarias were found in the swamp.

A good hour's march led us through corn-fields wet with dew to the boundary of the Dinka district, the last village of which, Jombi, belongs to the Ayell district of Gōk, and was passed not far from Kuimba's. We left here the grey sticky loam of the lowlands and entered upon the red ferruginous clay which covers the Bēli district of the Mittu tribe. The uninhabited borderland, Loba, consists of a wide grass steppe, and is frequented as a common hunting-ground. I noticed here a great ironstone ledge, which formed a kind of step in the midst of a plain; at its foot several Amomums were growing, the only ones which I have seen in this district. A large pool of water called Debbēr was covered with geese, which provided us with welcome food, as for many days we had passed through a devastated country where meat was unobtainable. From this point the soil was rather drier; it presented a perfect sea of grass. We passed by a deserted iron-smelting place, where we saw the remains of its neatly constructed furnaces. We next reached Khor Lila, in the district of Mēr. This swampy *khor* is completely shut in by vegetation; it contains water throughout the whole year, and is said to be identical with Khor Gulmar, upon which we camped when travelling from Rumbēk to Jōt. From midnight there had been thunder and lightning, but fortunately the rain kept off until the early morning, when all our goods were packed for the march. We then resumed our journey, marching almost parallel to the

khor, and passing many small camps erected by the numerous fishers. I saw dams and weirs in the *khor*-bed to stem the current, showing that the people are keen fishermen, and the numerous pitfalls in the high grass indicated their love of hunting. Leaving the *khor*, the soil became again stony, and steppe-wood took the place of the high grass. Then followed small villages surrounded by fields; they were especially numerous in the district of Mabongo.

No platforms were to be seen in this district; the small huts of the Mittu, which stand upon the ground, very much resemble birds' nests. I also noticed here lounge-benches such as are common among the southern tribes. The small tobacco plantations were hedged round. The tribal marks of the Bēli are scars radiating from the glabella over the forehead, and the extraction of the four lower incisors. The men have their upper lips, and the women both lips, bored; they wear in them large quartz balls or plates, or pieces of wood ornamented by brass nails. The hair is twisted into locks, each lock being drawn through a plate of iron, and these plates almost completely cover the head. Khor Lila forms the boundary here between the Agār and the Bēli, but several Bēli villages have been erected across the *khor*, for the Bēli are very fruitful, and if it were not for the slave-trade, they would soon completely fill the country. Beyond Nyang, where, as in all the villages of this district, the people obtain their water from wells, grass steppe, light woods, and beautiful groups of bamboo intermingle, and numerous butter-trees form a striking feature in the landscape. A large depression filled with water and frequented by many water-birds is situated at the entrance of the village of Mabongo, which gives its name to the district.

Our small station bears the same name. It is occupied by a single Dongolaui, who rules like a sultan; his huts stand in a large bamboo enclosure, and his immense corn magazine, which is erected upon a platform, held already enough corn to supply Ladó for four or five months, and the harvest is not yet gathered in! What a shame it is!

A pool named Mangillīhi marked the spot where we entered the district of Jēr; there were many butter-trees near (called by the Bēli, *kitto*), as well as tall tamarinds, together forming

the chief beauty of the landscape. The rich green foliage of the indiarubber creeper (called here *billa*), with its white bunches of blossoms and its strong but pleasant perfume, abounds in the Mittu country, and is very beautiful. Sanseviera (*toi*) also grows there, but the most curious form I noticed was a plant much like a euphorbia, about three feet high, with a grey stem about two and a half inches thick, which had at its upper end six to eight short thick branches; these, as well as the stem, had an immense number of scars where the leaves were inserted, and beneath each scar a short sharp thorn, which gave to the plant, at this time without leaves or flowers, a stumpy, prickly, uncanny appearance. It grows in groups of two or three, and its character appears to resemble its looks, for the natives, who call the plant *kibboia*, say that if buffaloes knock their heads against it, they are blinded by the juice and their heads swell. The people take good care, therefore, to avoid it.

Khor Maholu, which delivers a considerable quantity of water into Khor Lila during the *kharīf*, was at this time only a large pond. Its water is used by the people living in the scattered *zeríbas* belonging to the village of Magulu. Where the corn-fields which surround these *zeríbas* end, park-like plains abounding in high trees, or broad bare flats of ferruginous clay, covered with scanty moss-like turf and many small termite hills, are noticed. The wells of Karaïbote are circular basins sunk into the hard clay soil; they contain dirty water and water-lilies. Worms of all kinds are found in them, and they are the breeding-places of the Ferentit (*Filaria medinensis*, Guinea worm), which is so abundant in this district. Hundreds of swifts flew over the small doléb plantation near the village of Imudi, which lay hidden in the midst of bamboo thickets. The latter extended to the corn-fields of the village of Bauru, where we camped.

Our porters, with their "buttoned" upper lips and the glittering knives stuck behind in their girdles, were a merry set, always ready to sing and dance. Hardly had they laid down their loads, when they formed a large circle for conversation, their naked and very ugly wives joining in quite freely. I noticed here an exceedingly curious custom. One

evening, when all had assembled for an evening entertainment, the villagers seated themselves in a group, surrounded by our porters, and began to sing a chorus. All of a sudden one of them sprang out of their midst and began to load my porters with opprobrium, notwithstanding that they belonged to their own tribe. This very insolent attack, which was interspersed with all kinds of very low jokes, was given in the quickest time, and accompanied by the clapping of sticks and the shrill trills of the women. Our porters appeared to take the whole affair in good part, and laughed at the jokes and the obscenities quite heartily. When at last the singer was tired and stopped, one of the company seized a green durrah-stalk and began to beat him on the back, as a sign of the greatest satisfaction and appreciation. Our people then took their turn in the performance, and after they had returned the compliments in the same manner, the others commenced a perfect wildfire of the most horrible invectives against their friends and compatriots, who only laughed, and apparently had no cause for displeasure. As soon as one party was tired, the other party took up the song, and this amusement continued until far into the night. Such scenes often occur between the inhabitants of different villages, at a place which has been previously determined upon, and all parties appear to greatly enjoy the fun.

The country which joins Bauru is covered with red ferruginous clay and intersected by many rain-gutters, along which bulbous plants abound. The country is beautiful and well cultivated. Village follows village, only separated from one another by corn-fields, thickets of bamboo, and sometimes small stretches of park-land. Grass steppe proper is first noticed again on the borders of Gumro, where broad depressions favour the growth of grass. Passing through the corn-fields of the village of Dubre, in which were great numbers of shrieking parrots, we arrived at a small swampy *khor* called Chongo about here, but known farther north as Gulmar and Lila. Notwithstanding the existence of a number of pools of standing water among the high reeds, we were almost able to cross the *khor* with dry feet. In good time we reached the small station of Lobaledé, which is situated on the eastern

bank of the *khor*, and is usually known by the name of its overseer, Rahmet Allah, who occupies it with about ten to fifteen armed slaves. Just at the entrance to his *zeriba* were several neatly carved poles, each separating into two branches, which were tipped with buffalo horns.

In the Bēli district it is customary, as soon as a young man has killed a buffalo, an elephant, a lion, or a leopard, for his nearest relations to give a dance, at which the mother of the successful hunter dances in a perfectly nude condition. "I gave birth to this hunter," she cries to her audience, whilst her son, stretching forth his right arm, seems to impress upon the spectators that it is not advisable to come too near it. The people then erect a post before the village, and decorate it with the skull or horns of the slain animal, so that every stranger visiting the place may ask the name of the brave hunter. In all the villages are carved poles on which to hang the great drum, and withered trees upon which trophies of the chase, such as the skulls of antelopes, are fastened; also bow-shaped traps used in hunting game.

This station is celebrated for the splendid ice-cold water which is found in the *khor*. A lion had done us the favour of killing a buffalo and then permitting itself to be driven off, and an elephant had been killed in the morning, so that there was meat for every one. When we left, however, next morning all that remained of the buffalo was its splintered bones.

After passing through the corn-fields of Lobaledé, and then through brushwood and over a savannah, we crossed several small swampy streams which flow into the Chongo, and then rested in an Anogeissus wood in the district of Lori. We next passed through deserted fields and large plantations of *Hibiscus sabdariffa*, as far as a broad swamp named Mabollo, upon the other side of which, under the shade of high tamarinds, was a well containing very good water. Our guides, however, had arranged to halt at the Dokurru wells, which contain bad water, and were disappointed at being compelled to march farther on in the blazing sun, although we reached the Lulunyi swamp shortly after midday, and halted there. A low chain of hills running from east to south lay before us, shutting out all view. Late at night we received a visit from

several Negro chiefs, who brought with them small gifts of meal, ground-nuts, round dumplings made of durrah meal, and pots containing very uninviting soup.

After a good hour's march over the hills in splendid starlight, we reached the little villages of Karro and Koyo, which join one another. We soon left them behind and passed over a broad *khor*-bed, containing only a few pools of water; then on through steppe-wood, where the blossoms of small gardenias filled the air with their perfume. The district we had just passed through was rendered especially charming by the presence of small woods of tall trees, chiefly Humboldtias, with slender tall trunks, and a few Bassias growing in groups of two or three. I have never seen woods formed of the Bassia except far to the south-east, upon the road leading to Fajulli. Heaps of stones by the side of the road, upon which were placed the two-horned posts I have just mentioned, marked the spots where the inhabitants of two neighbouring villages were accustomed to meet together to abuse each other, *i.e.*, to enjoy themselves.

Passing by a small pool called Domebra, we came in sight of lofty Jebel Gurken, which we kept in front until we reached the station of Guéri, which is situated on Khor Yalo, not far distant, I was informed, from its confluence with the Uōko or Ombolokko. The Yalo, which makes a bend at four minutes' distance from the *zeríba*, is eighty-seven feet broad, and was at this time two to three feet deep. It is ençlosed by steep banks about eleven feet high. The stream is often bank full, but does not overflow here; on one side of it large blocks of kidney-shaped ironstone crop out. Numbers of herons and storks were busily engaged in fishing. Buffaloes are numerous in this country.

7. The Lori Country and the Upper Yalo as far as Sayadīn.

A FRUITFUL REGION—GRASS-FIRES—LOST IN THE BUSH—A CONCERT OF LIONS AND DONKEYS—AN AFRICAN GARDEN—PARROTS—THE RIVER YALO.

From Guéri we had to march to Sayadīn (the "hunter's village"), and in so doing we first passed through the large and numerous villages in the districts of Guéri and Koddu, which were nearly all enclosed in high thorn fences. Helmia and sweet potatoes were cultivated everywhere; the scaffoldings which are used for drying sesame were heavily laden, and specially constructed structures had been raised for the dokhn, which had just been reaped, and was about to be exposed to the sun before being thrashed. Khor Ombolokko, after having received a number of small watercourses, flows into the Yalo, and, like all its tributaries, overflows its banks for a considerable distance. In the *kharīf* it forms a difficult swamp. Its bed is about thirteen feet broad, but when we passed it the stream was only seven feet across and ten inches deep, and contained yellowish loam-coloured water. Whereas the bank on this side of the *khor* slopes gently, the other is high, and does not permit the water to overflow.

I shall long remember the march from the Ombolokko to Khor Merbu. One of my men had incautiously thrown a light into the withered grass during our halt; the flames immediately blazed up, and, being driven by the north wind, followed at our heels. At such times it is necessary to bring into play all the composure and experience learnt by a long life in the tropics in order to bear with calmness the threatened destruction of valuable notes and collections. Fortunately the broad belt of damp grass at the *khor* broke the force of the fire, and at the second ford of the winding Merbu, a deep swampy *khor*, we were able to rest after racing before the flames.

The path we were following had for a long time only been used by natives, so that it was very difficult to find, for in many places it was overgrown with grass. Our guide therefore,

instead of keeping to the south-south-east, turned to the east, probably with the intention of reaching the road which leads direct from Mvolo to Sayadīn, and soon led us into the middle of a dense bush. We were therefore compelled to halt under the blazing midday sun to reconnoitre. About a quarter of an hour to the south-south-west of our halting-place we found a pitfall, near which the footprints showed us that game had recently been caught here and carried away. We therefore followed the footprints on the dry soil, which was a difficult matter, and in about half an hour we reached the small village of Mbaro, where we received a good reception and found good water. Part of an antelope was also offered us, and readily accepted.

All the lions in this district appear to serenade Mbaro at night, for their howls lasted till dawn. Each howl produced a prolonged "he-aw" from two donkeys which had been brought with us for the use of invalids; under these circumstances sleeping was not easy, so, although the morning was very cold, we were glad to break camp. The march through the park-like Lori district, with its small woods and numerous streams, was more like a pleasant walk, especially as, after we had passed the village of Rango, the country was studded by picturesque groups of rock. Jebel Madiri, a small gneiss hill, looked really like a mountain, rising as it does from broad grass steppe. Behind it we noticed the Mdilo hills trending towards the south. I saw a Hyptis in the fields; it is here called *kollo*, and its fruit was just ripening. The soil is splendidly cultivated, and on account of thickets and tall trees, which had been left standing, the country looked like a garden, in the midst of which were situated the clean well-kept *zeribas* of the village of Mbelle.

This village is almost joined by that of Lori (marked Tori on the maps), the residence of the Lori chief, Seï. It is formed of a large group of huts surrounding an open space. The stores of ground-nuts are here protected from the ravages of mice in large baskets plastered with clay and placed upon stone pedestals. In addition to durrah, dokhn, and Hyptis, much tobacco, cotton with white seeds, and hibiscus are cultivated. After passing the village the ground commences to fall. It is composed of the dark red ferruginous soil which is so

characteristic of the south; in all depressions it is covered by a thick layer of black detritus. The corn-fields are inhabited by numerous parrots, which are seen in companies of from two to six, and are not at all wild.

In the whole of our province I only know of three species of parrot—the *Palæornis torquata*, which is widely distributed, and called by the Arabs *durrah*, or more commonly *sitte dudu*; the *Pionias Meyerii*, which is also common; and, farther south, the elegant *Agapornis pullaria*, which plays great havoc with the corn-fields. In the extreme south the well-known grey parrot, *Psittacus erythacus*, is also met with.

All of a sudden, a very conspicuous mountain mass, situated in the middle of the steppe-wood, came into sight. Its centre rose higher than Jebel Nyerkani, near Ladó; at each end it had long spurs; the Negroes called it Jebel Tobe. After passing Khor Deluru, we left the beaten path and struck through the wood, until we at last found a good road, which led us straight to the banks of Khor Yalo, here a beautiful stream, which shoots with a roar over the rocks filling its bed, and is fringed by forests. It was a hundred and sixty-five feet broad and thirty inches deep. Many small streams flowed across our road into the river; one of them, Khor Lau, was edged by incipient "gallery" woods. Khor Ofo is noteworthy on account of the flats on its northern bank. Rather broad white belts of gneiss were noticed in the red soil as far as Chief Ritku's village, Mbaro, which lay at about ten minutes' distance from our path. Many hyænas howled in the grass, but were cautious enough to keep out of our way. For a few moments a somewhat lofty range of mountains came into sight; my guide called it Dokolo, but I cannot find it marked upon any map. From the village of Kyéro, where we halted, we obtained a good view of the mountain; it is not seen, however, from the station of Sayadīn, which has been newly built in the middle of a wood. This village is a small place, situated on the bank of Yalo, and is a centre where game of every kind, especially elephants, is found, and a large quantity of ivory can be obtained.

8. Return March to Ladó.

"NORTHERS" — STEPPE-FIRES—A CHIMPANZEE — FEEDING ELEPHANTS—GREAT THIRST—A DANAGLA VISITATION—KEDERÚ HUNTING TROPHIES AND GRAVES—A BATH IN THE ITÓ—BACK AT KEDIBA.

Originally we had intended to proceed by the direct route to Kabayéndi, but letters from Amadi compelled us to relinquish this plan. Proceeding in a northerly direction, we reached the Yalo after an hour's march, at a spot where an island divides the river into two arms. Its depth varied between five and seven feet, but ledges of rock enabled us to cross with ease. Splendid date-palms, quite as fine as those seen in the southern *khors*, ornamented its banks. Broad belts of humid grass enclosed the many hilly undulations, and provided pasturage to herds of elephants. We frequently passed groups of rocks and masses of gneiss, but none of them afforded a prospect. Crossing Khor Ojo, we entered the Morú country, or rather that part of it which is called Morú-Madi on existing maps. Morú-Madi, however, is a pleonasm, for Madi is merely the name given to the Morú by the Lóri, and is an appellation rejected by that tribe.

Marching at this time of the year is rather unpleasant, as strong northerly winds whirl up the vegetable ashes, which almost blinded us. Proceeding at a fair rate, we soon passed Jebel Riku, an isolated mountain, and reached Ngunyi, the inhabitants of which had been frightened by a steppe-fire, which destroyed their huts and laid waste their fields. Scarcely had we reached Mollo, when we were compelled to halt, for the country all round us was ablaze, and the heat most oppressive. Khor Gullo, fringed by fruit-laden doléb palms, flows past this village. It had shrunk into an insignificant swamp, crossing which we made for the hills, which vividly reminded us of the vicinity of Mvolo, presenting as they did a combination of bare rocks and palm-trees. As we went on, the country grew more rocky and desolate, and euphorbias once more made their appearance. The huts of the village of Yere are built in the Morú and Kederú style, being low, with dome-shaped roofs,

and having walls ingeniously made of bundles of straw, so as to present a chequered pattern. A lofty mass of gneiss lies close to the village, and repays an ascent, as many mountains are visible from its summit, the bearings of which had been taken on former occasions, and among which were Jebel Osó, Jebel Togodo, the two jagged peaks of Donvu and Jebel Paya, as also Jebel Riku, which we had long since left behind us. The grass was ablaze all around, and the dense smoke, aggravated by a strong northerly wind, made it difficult to read the compass. Numerous minor peaks peeped out from the forests round us, and our road led past one of them, Jebel Taya. A very small village, which we reached about half-past twelve, afforded welcome rest after a six hours' march in the scorching sun; unhappily, the scanty supply of water obtainable from its wells smelt so badly that, notwithstanding our great thirst, we took no delight in drinking. Fortunately Chief Tokkoro's village, Kenyi, or Kenyi masa, lay at a distance of only twenty minutes' walk. This extensive place abounds in filth, especially at this time of the year, when many of its inhabitants are absent, but we were able to obtain a drink of good water from the river which flows past it. A further march of twenty-one minutes brought us to the Amadi station, where we were delighted to find awaiting us a young chimpanzee, a present from the Monbuttu chief, Mbitima.

During my short stay here I set the station in order, and distributed the soldiers, who had arrived during my absence, among the out-stations. Scarcely an hour remained for taking bearings to render my former surveys more complete. A nearly total eclipse of the moon occurred on the 5th of December, and was hailed by the Danagla, as is customary, by knocking together all their tin pots and shrieking. Letters from the Meshra-er-Rĕk, which informed me that the steamer *Bordén* might be expected at any moment at Ladó, compelled me to hurry my departure. From these same letters I learnt the mournful news of the death of Mgr. Comboni.

The Ayi, or Yei, is of considerable width at this place, and reached up to our knees. Having forded it, we passed Jebel Merre, where a large herd of elephants was peacefully feeding, and made straight for the lofty black rock of Killa,

which rose in front of us like a watch-tower. Beneath a cliff, radiating from it, we saw the blackened ruins of the village of Vari. It was already 1 P.M., and we had as yet not found a drop of water; the guides appeared to be in an uncertain state of mind, and asserted that no water could be reached before sunset. We were therefore all the more pleased when we met a Negro in the midst of the wood, whose sister we had restored to him at Ayák, and who offered to act as our guide. And thus, at 3 P.M., after a hot and dry march, we reached the village of Mizani, which lies at the foot of the densely wooded Jebel Ui.

We were now once more in the Kederú country. Our course thus far had been southerly, but we now turned to the east, in order to reach our old road. Our night's march was repeatedly disturbed by elephants, but early in the morning we reached the bed of Khor Arita, which is possibly identical with Khor Arise.[1] For about ten minutes we marched along its bed, which abounded in pools of whitish water. Another burnt village lay in front of us, beneath Jebel Nyangali—it had been "visited" by Danagla! Jebel Waru is a mass of granite rising boldly above the red sandy soil to a height of four hundred feet. Its flanks are densely wooded, and, to judge by the numerous deep, narrow fissures, across which we were frequently obliged to jump, it must yield an abundant supply of water. Khor Labikko was already known to us as a tributary of the Itó, and was at present quite dry.

The village of Mollo is situated near this *khor*, in the midst of corn-fields. I noticed there many trees hung with skulls and horns. Unfortunately these trophies were obtained only from dwarf antelopes and beasts of prey, which appear to abound in the vicinity. From a lofty pole in the centre of the village the skin of a python fluttered in the wind. The numerous graves round the village could be recognised by pyramids formed of slabs of rocks or by huge heaps of stones, from the centre of which rose a pole, with three notches in its upper extremity, which was shaped exactly like those which are seen on the ancient Mohammedan tombstones in Southern Arabia. I saw occasionally a third form of grave enclosed

[1] Such is not the case.—E. G. R.

by slabs of stone arranged in a circle, so as to support a larger slab, thus forming a kind of table. The care which the Mittu and Kederú devote to their graves constitutes a fine trait in the character of these tribes, who differ in this respect very favourably from the Bari and Dinka.

The ground beyond Mollo presents features which vividly recall the Makraká road. Broad flats of reddish sand, occasionally quite bare, but more frequently covered with thorn scrub, alternate with open forests and fine shrubberies, alive with *Nigrita Arnaudi*. It was our intention to take a more southern route, past Jebel Kuryok to Zanga, but our guides frustrated our plan, and we were obliged to submit. Khor Loa afforded us at least some drinkable water, but the heat was so great that even our carriers were glad when we halted, a little after noon, at Khor Itó. This *khor*, which we now crossed farther south than previously, is here about fifty feet broad and forty inches deep, and flows between rocky banks about ten feet high.

Only African travellers can appreciate what it is to reach a running stream like this after a six or seven hours' march. We rested a while under the shade of tall trees, and our carriers availed themselves of this opportunity to take a refreshing bath. We then started, and after passing through durrah-fields, arrived at one of those small *zeribas* which the Danagla have sown broad-cast over the country. Our unexpected arrival led to the precipitate flight of the occupiers, and we thus found ourselves alone at Berri, with little hope of being able soon to leave it, when a neighbouring Negro chief unexpectedly put in an appearance, and promised to furnish us with porters. This promise he kept, so that, crossing a thinly wooded, park-like country, and leaving Jebel Fora close to our left, we reached Khor Tafári in good time. This *khor* now presented a perfectly dry bed of sand, about a hundred feet wide, but when in flood it can only be crossed with the aid of a rope-bridge made of lianas. Extensive corn-fields separate the village of Kediba from the *khor*. This village we had already visited during the outward journey, and we now followed our old road from here to Ladó.

9. From Bedén, on the White Nile, through Fajelú to Kakuák.

A WASTED COUNTRY—FAJELÚ—GUMBIRI—KAKUÁK AND ITS MOUNTAINS—THE WATERSHED OF THE YEI—GANDA—TRIBAL DIVISIONS OF THE MÁDI—AGRICULTURAL PROSPECTS.

We left the station of Bedén on the 9th of October, and climbed the hills which border the western banks of the river. A broad rolling steppe lay before us, the few existing trees being almost hidden amongst the yellow grass of the undulating fields. Blocks of rock and gneiss and quartz rubble were scattered in all directions, especially near the innumerable rain-channels which furrowed the country, and which at this season of the year were almost empty. Numerous euphorbia hedges, always used for the Bari cattle *zeríbas*, were also to be seen, proving that this district was once well peopled. Smallpox and famine, caused by failure of the crops and continuous raids which swept off the enormous cattle herds, have changed this country from a garden to a desert. It is evident that this steppe might be used for agricultural purposes, as well as for pasturage, to judge by the luxuriant growth of durrah, dokhn, hibiscus, and tobacco which surrounded the few Bari homesteads we saw on our way. After passing a gneiss hill, Zindiru, the trees became rather more numerous. Steppe-woods formed of figs, tamarinds, butter-trees, acacias, Balanites, Zizyphus, and the very common *Diospyros mespiliformis* intermingled with the sea of grass. A species of Boswellia forms a distinctive feature of this region; its foliage, as seen from a distance, has a reddish hue. It provides a quantity of sweet-smelling gum, which the Arabs use as incense, and its stems are much valued for hedges, as it is very tenacious and soon takes root and blooms afresh.

The village of Mógedo, where we camped for the night, is a rather large collection of huts, differing in no way from the usual Bari villages. Chief Rombe promised to provide us with porters early next morning, but whether due to the Bari's intense dislike of the duties of porters, or to the fact of this

being an almost independent district, his promise was only to be taken as an empty compliment; and although the big drums began at midnight to call the porters together, it was very late indeed before we were able to resume our march.

After passing between homesteads and extensive durrah-fields, which had just been sown with this year's second crop, we soon reached the savannah, and marched on rapidly over a red clayey soil. Many elephants frequent this grassy region, and enjoy eating the Balanites and Zizyphus, which are now laden with fruit. A chain of mountains, called by the natives Rego, lay before us; in the centre there was a deep depression, to which we made our way, and which proved to be a defile thickly overgrown with bamboos; it led us to a narrow pass between the mountains of Lurja and Boron, which was rendered almost impassable by thickets of luxuriant vegetation. While we climbed with great difficulty through it, I buried the hope of ever using this road for camels. The aneroid read here 0.35 inch lower than it did in Mógedo, showing that the rise had been considerable, although it was not very noticeable during the march. The district we had passed through must be completely without water in the winter, for even now, although the rainy season has not yet come to an end, we had difficulty in finding drinking-water. During the rains, however, a great quantity of water must flow from here to the river, for the ravines through which the watercourses wend their way, as well as the long, deep channels carved out by the erosive action of the water, are covered with white, coarse-grained sand and sharp quartz rubble.

Near to one of these, we entered the district of Fajelú proper, inhabited by various divisions of the Bari tribe. They are ruled over by independent chiefs, and only distinguished by a special dialect from the other Bari. On account of the very damp soil, a more vigorous growth of vegetation has sprung up here, and a small wood of Cæsalpinias and Kigelias, heavily laden with fruit, formed a pleasing, peaceful picture. Along the whole route we only saw two very small doléb palms. We camped for the night by the pools of Lódafe, where the porters were rewarded for their exertions by a cow. It was quickly killed and cut up, and, with plenty of meal,

it furnished a supper which lasted until four o'clock in the morning. Notwithstanding this protracted meal, we marched early, and soon reached the very steep ascent to the mountain chain which lay before us. The pass was overgrown with such high grass that no view was possible, but I climbed up Jebel Kyago, which lay near the road to the right, and obtained there a satisfactory view, besides being able to take a number of bearings by which to work out my map. The descent from this chain is inconsiderable; it may be best described as a step to the terrace which rises in the west. A bamboo wood grew along two small *khors*, Hauchu and Lotortioni, both of which flowed through deep ravines. Broad stretches of coffee-brown rich humus, black scattered blocks of rock, the murmur of water clear as crystal, by which ferns and moss grew luxuriantly, and the cool shade, reminded me of far-away mountain woods, and if it had not been for the characteristic vegetation, I could have imagined myself far from Africa. A long march through high grass and prickly Randia bushes forcibly recalled the fact that I was still here. The fields which surrounded the village of Mítika had been much damaged by locusts, and as the Fajelú only cultivate a little durrah, they will be badly off for *mrissa* this year;—eleusine forms their staple food.

The rain poured down every day, and not alone by day, but by night too, so that the soft humus clung like pitch to our feet. Chief Fitia, a toothless old fellow, had, notwithstanding an extra ration of brandy, the greatest difficulty in collecting porters for us. The drums seem to have become hoarse on account of the rain, and only gave forth a sorrowful sound. We had to be content to begin our march after 7 A.M. The rain accompanied us. Whole stretches of this district were overgrown by Amomum and aloes. A great number of small watercourses drained the soil; notwithstanding this, we continually came upon swampy depressions between the rows of hills, their stiff, fetid mud being very unpleasant. I noticed plants on all sides, such as Solanaceæ, gourds, and the castor-oil plant, which indicated old settlements, and we also passed many hamlets and villages encircled by extensive fields where eleusine, Hyptis, dokhn, and Lubia were being grown. The

homesteads were mostly enclosed by hedges made of strong beams and thorns, probably as a protection against the numerous lions. The villages in this district are generally situated upon the tops of hills, and the numerous mounds and mountains have quite a romantic appearance. Jebel Loka, called Jebel Kuerkuit by the Bari of Bedên, forms an excellent landmark, on account of its peculiar shape. It is seen for a considerable distance, unless, as is often the case, its summit is hidden by clouds.

We stayed the night in the village of Kerbolong, near the mountains, and then proceeded to the adjacent station of Gumbiri. The rain sufficed to wet me through and to interfere with my work, but did not damp the spirits of the porters. After passing through the fields which surround the village of Goddu, our road led through swampy lowlands, where swarms of yellow-backed widow-birds (*Penthetria macroura*) were climbing about the tall grass; then we reached a broad road, made by the Gumbiri people, for which in such weather we were doubly grateful.

The station of Gumbiri, in Fajelú, our farthest outpost in the Makraká district, was reached early, and we remained there for one day. As the station had only just been built and the surrounding natives were still rather timid, my stay could not be thoroughly utilised. I have, however, been able to ascertain on this journey that Khor Bibia has been till now over-estimated, and that, like Khor Luri, it receives its waters from the Loka and Kero mountains. It is said that Kiri, on the Bahr-el-Jebel, can be reached from Gumbiri in four days' march through very mountainous country. After marching between the eleusine fields which surround Gumbiri, and which are divided by deep ditches separating one man's property from another, we arrived at high grass land, where numberless *khors* rush over blocks of rock; the latter often form bridges over the streams, but usually cause rapids. Here and there, swampy stretches were covered by small woods of Vatica. Troops of chattering wood-hoopoes were to be seen in the numerous butter-trees. Two small hills near the road, at the foot of which there were many fungiform termite structures, are called Kéniy and Mundiá, names given in Fajelú, as well as

in Bari, to first and second born male twins. A buffalo herd emerged from the thick brushwood near Khor Kinda, a tributary of Khor Yeï, and crossed our road, but fortunately did no damage.

This *khor* used to form the boundary between the Makraká, who were pressing forward from the south-west, and the Fajelú, who were retreating towards the east. The latter, being in great difficulty, sought the aid of the Danagla, under command of Ahmed Atrush, and were then able to drive back the cannibals; they had, however, to pay a heavy price to their deliverers. About an hour from the other side of Khor Kongoro is the boundary between the Fajelú and their relations the Kakuák, in whose district several of our stations are situated. The district of Kakuák is very mountainous, and the lofty summits of Korobé and Kurja served us as landmarks. The road makes a great bend round these mountains, which appear to stretch out in a long line towards the south; the torrents rushing down from the heights glisten like silver threads, and joining form the important Khor Lunn, which we passed before reaching the cultivated region where sesame, Hyptis, Vigna, eleusine, and tobacco grow. White blossoming Tephrosias, on the borders of the fields, are probably grown for use in fishing. *Zeríbas* and fields alternated with steppe and bush; in the latter the large-leaved Anona were conspicuous, while in the steppe there were groves of Amomum, and sedges and gigantic reeds grew in the muddy bottoms of depressions in the ground. Upon the slope of Jebel Kurja, near some *doleb* palms, was a small village ruled over by a young woman. From this place we climbed up the steep black, bare granite rocks, over which small watercourses murmured. The splendid deep blue Salvias formed a great contrast to the dark red Ipomœas, which twined about everywhere; cushions of moss and Selaginellas grew along the water.

I was reluctant to leave the very beautiful view here which included the mountains of Kaliká in the south and those of Ndirfi in the north. We descended between rocks and over rubble to the level plain, through which many swampy *khors* run, and in which we had twice to ford Khor Lunn before we reached the small station of Korobe. This station is situated

upon a hill, round which Khor Lunn flows, and it is celebrated for its never-failing good water and its invariably cool temperature, on which account it would form a good sanatorium for the province; it is only about five hours' march distant from the station of Ganda.

After crossing Khor Lunn again, this time by means of a very good bridge, the country began to rise rapidly. The path, which led over yellow, moist, loamy soil, passed between two rows of mountains, the one on the east being composed of many peaks, eight hundred to fifteen hundred feet from the road, which was often crossed by spurs from its hills in the form of flat rocky ridges or high Mamelons. All the *khors* were contained in very deep beds, but although they were troublesome to cross, the march over the broad road, edged by luxuriant vegetation, was, on the whole, very pleasant. Kigelias and Prosopis laden with fruit, extensive reed-woods, then stretches of high grass with gigantic Echinops, groves, tall acacias, all the bushes grown over with Crucifera, which exhale a stupefying odour, and the white flowers of which shone like stars from the dark green bushes, the road itself being strewn with the five-pointed flowers of a Kæmpferia, all combined to form a delightful garden. At ten o'clock in the morning we found ourselves upon a watershed. All the brooks we had as yet crossed were tributaries of the Yeï, or at any rate they flowed to the north, whereas now the streams flowed to the east. This fact is indicated upon Junker's map of the district of the Yeï, but the streams do not flow into the Bibia, as in that map, but into the Bahr-el-Jebel between Dufilé and Wádelai. The hills around Janda are richly wooded and encircled by small *khors*. The character and vegetation of the country are, on the whole, very like those of north Unyóro, except that there are no banana groves. The place of the banana is taken here by *Musa ensete*, which is conformable with the altitude of the country. Date palms were noticed near Khor Lékebe, and the bright flowers of the Spathodias were blooming amongst the thick acacia wood which covered the hill of Janda.

The station of Janda (Ganda), our most advanced post in the Kakuák country, was only erected last year, and has since

served as the centre for our relations with the southern tribes (Kaliká, Lúbari, A-Lúri, and Lógo). It has, however, lost much of its importance by the erection of a new station on the upper waters of the Kibbi, in Kaliká, and by the latter being connected with Wádelai in the east, with Tambira (also on the Kibbi, but in the Lógo district) to the west, and with the station of Kúbi in the Monbuttu country, whereby a direct and in part navigable road has been opened up between Monbuttu and the Bahr-el-Jebel. Janda is still, however, one of the most interesting posts in our province. Its high hill (four thousand and eight feet by B.P. observation) commands an extensive view over the whole country as far as the mountains which run along the west bank of the Bahr-el-Jebel, whilst towards the south an undulating stretch of country loses itself in the far-distant sky-line. At about an hour's march to the south of Janda, the territory of the Kaliká begins; it is followed to the east and south-east by that of the Lúbari, which in turn extends to the Mádi of the Bahr-el-Jebel. The A-Lúri live due south. On the west the Kaliká extend northwards in the direction of Ndirfi. "Luggar," on Junker's map, is, as its name implies, of Kakuák or Bari origin. Its chief with his tribe are said to have been driven by the Makraká from their original home into the Kaliká territory. The country to the west of the Kaliká is inhabited by the Lógo, who extend from the middle course of the Kibbi as far as their kinsmen, the Abukaya. Babe, or rather Bagbe, on Junker's map, is really the name of a Kaliká chief.

The people who came with the chiefs Lēmin and Bagbe to visit me reminded me by their appearance of the Mádi at Dufilé, having, like them, dark chocolate-brown skins, rounder heads, less prominent cheek-bones, and rather thinner lips than the surrounding tribes. They were all completely loaded with heavy iron ornaments in the shape of bracelets and anklets. I rarely saw copper, but ivory rings on the legs, sometimes six inches broad, appeared to be the pride of their owners. All wore earrings, like the Mádi, and some had as head-dresses a flat-shaped cap made out of plaited string and decorated with ostrich feathers, which had been coloured red by iron ochre. They spoke Kakuák fluently, but used their own language

among themselves. Specimens of it which I noted down show its identity with the Mádi idiom of the Bahr-el-Jebel, the distribution of which is therefore, as far as my present knowledge goes, as follows:—

(1) The Mádi, to the east and west of the Bahr-el-Jebel, (2) the Lúbari, (3) the Kaliká, (4) the Lógo, (5) the Brera division of the Amadi on the Kibali, (6) the Abukaya-Oizila and Oigiga, (7) the Jojeri of Morú, near Wandi.

The relationship between this group and the westerly group in the Bahr-el-Ghazal district, which have a remarkable linguistic similarity, remains still to be discussed. At any rate there is a well-marked difference between the language of the Mádi group living in our province and that spoken by all the other tribes and peoples. It constitutes a compact division, to which I would give the name of southerly, to distinguish it from the northerly group of languages (Dinka, Bari, &c.)

The whole territory occupied by the Mádi was formerly enormously rich in cattle, and even to-day in some parts, as, for instance, at Jebel Vatti, large and numerous herds are still maintained. On the whole, however, the number of cattle has been reduced almost to zero, owing to the frequent raids made from Makraká. In many of these *razzias*, six to eight thousand head of cattle were carried off, and very quickly dissipated. Now, however, agriculture flourishes, and besides *talabún*, red durrah, and sesame, which used to be cultivated, the large-grained white durrah from Makraká, which yields exceptionally good flour, and was probably originally introduced from the north, is also grown. I need hardly mention that gourds, *Helmia bulbifera*, Lubias, hibiscus, &c., are largely cultivated, but it is interesting to note that good yams are grown on Jebel Vatti.

At Janda a perfectly new scraggy plant was brought me from Lúbari; it had greyish-green, lancet-shaped leaves, and, like the potato, some forty bulbs upon its roots, each four to five inches long, about an inch in diameter, with a thin white skin; when cooked it forms a good vegetable. It is now much cultivated here, and is called *lombo;* the natives plant its shoots and bulbs all the year round, and have only to leave sufficient room between the plants (which reach a height of

from twenty-four to thirty inches) to allow for the growth of the bulbs.

Indisputably, the meteorological conditions of this district are very favourable to agricultural operations. There are two very sharply defined rainy seasons, an abundant rainfall, underground water, a thoroughly damp soil, a moderate temperature, and a considerable population. The tomatoes (*Solanum lycopersicum*) best show what the low temperature can accomplish; they are as large here as those grown in the "blessed" islands of the Ægean, whereas in the hot lowlands, on the borders of the Bahr-el-Jebel, they reach at most the size of a nut. Tobacco also, of which both species are grown, attains here very considerable dimensions.

Janda must be a real paradise for the collector in springtime. Although the rain never ceased and the high grass rendered the chase very difficult, I was able to obtain in a very short space of time many new species both of mammals and birds, not to mention a large number of rare species, such as *Myrmecocichla nigra*, *Elminia Teresita*, *Lanius gubernator*, *Pentholœa clericalis*, *Circaëtus zonurus*, *Bubo capensis*, and others. Snakes, too, are exceedingly numerous; most of them are small Colubridæ.

10. The Kakuák and Fajelú Countries.

RETURN TO THE YEÏ—A CONFIDING MOUSE—THE TRIBAL DIVISIONS OF THE BARI—THE MARSHIA OF RIMO—A MAKRAKÁ VILLAGE.

The road we took on our return journey from Janda to the north led through Korobé, which we reached in a storm of rain. It passed mostly over steppe land, through which flowed several large streams, such as Khor Kimil and Khor Kembe, as far as the small station of Langómeri, near to which are the steep and naked cliffs of the Kasa hill. The country is well cultivated, and is said to be very fruitful. The inhabi-

tants of Kakuák are very numerous, and live in scattered *zeríbas* encircled by thorn hedges. The huts remind one of those of the Bari, on account of their low walls and small doors. Inside each *zeríba* tobacco is cultivated, and two species of Phaseolus overgrow the thorn hedges. The women, who are patterns of ugliness, were just employed in beating eleusine on large flat pieces of rock, which lay scattered about, and heaps of Hyptis were drying in the sun, giving out an aromatic odour. I took a stroll through the eleusine fields to observe the habits of numerous dwarf parrots (*Agapornis pullaria*). I shall always remember this walk, for on a stalk I noticed a small bird climbing, which appeared quite strange to me. I soon caught it—the first *Crethia* from north-east Africa, which neither Rüppell nor Heuglin mention. A young specimen of the rare *Myrmecocichla nigra* was also captured, and the pools afforded a new *Triton*, besides which a number of very small frogs with very strong voices attracted my notice.

An almost absolutely straight road—an *avis rarissima* in this country—led from the picturesque rocks of Langómeri to the Yeï valley. Its soil was a very moist alluvial clay, mixed with much yellow sand. The woods were very light indeed, but on the sides of the road were numerous sharp cutting sedges. At the ford, the Yeï was about twenty-five feet broad and thirteen feet deep, so that the people had here improvised a bridge, but I am still not quite clear how the porters, with loads upon their heads, crossed it. We all preferred a very unpleasant cold swim, and soon a number of brown and black figures were splashing in the river, bidding defiance to the numerous crocodiles. Shortly afterwards we had to cross another stream, which was thirteen feet broad and over six deep. The bridge here was so respectable that we all crawled over it, in order not to hurt the feelings of its architect. The station of Vátako, which is situated upon an ascent, is a wretched, unsavoury village. We had to remain there two days, almost as prisoners, for the great feast (*Id-el-Kebir*) prevented our marching, and the continuous rain did not allow us to leave the miserable huts. The natives brought to me whole families of the *Golunda pulchella*, a beautiful and

very confiding mouse, which at once ate from my hand, showing that it might easily be kept in a cage. As a rule, the female has three to four young with her; they are usually striped exactly like the parents, but their rusty colour is of a rather darker shade. This was, however, no place for either hunting or collecting, for all the trees had been cut down in the neighbourhood, with the exception of a few solitary tall ones along the bank of the river. I was therefore glad to move on, and after a tedious march through rain and mud, and a night spent by Khor Yembe, an important tributary of the Yeï, we passed through an open forest, in which a Xeropetalum was blooming. Then we reached Khor Kobbo, which is enclosed on both sides by broad swampy borders, and sends its rushing waters into the Yeï. Two trees thrown over the *khor* formed a rickety bridge, about sixteen feet above the rapid stream, which was forty feet broad and twelve feet deep. The swampy land on the other side of the *khor* was literally covered with *Parnassia palustris*, which could have almost been mistaken for a European variety. A short march led us through a hilly steppe, with swampy depressions, to the station of Rimo, our headquarters in the Kakuák and Fajelú countries.

Rimo consists of scattered groups of huts and *zeribas*, surrounded by fields. It is the centre of a perfect babel of tribes: Kakuák occupy the south and south-east; Fajelú the north and south-west; Mundú the west; a colony of Bari, who have wandered here from the Nile, have their dwellings scattered all about, and the true Marshia occupy Rimo itself. The cultivation of this district does not much differ from what may be seen elsewhere, except that a few very neglected bananas have been planted. Khor Geli, with its swampy banks, would be a remarkably good place on which to cultivate rice, but, of course, no one has ever thought of planting it. Cotton grows here very well. Rimo has suffered much lately from the depredations of elephants, which have broken into the station at night and destroyed the crops. It is very remarkable that I saw no vultures along the whole of my route, their absence being explained by the paucity of cattle, whilst the few goats hardly supply the demands of the population. The *Milvus Forskalii*, too, which is elsewhere so

common, is rarely seen here. On the other hand, I saw the *Elanus melanopterus* in full feather (in October); it arrives here in September, breeds, and leaves for the north in February or the beginning of March. The *Penthetria macroura* and *Euplectes flammiceps* are very common indeed, and were also in full feather.

Before I leave Rimo, and the Kakuák and Fajelú countries, it may not be out of place to consider the position of these tribes with regard to the surrounding peoples, more especially as Fajelú has not been previously visited, so that my journey was the first through this district.

The BARI people, to which both these tribes belong, are divided into the following eight large divisions:—(1) Bari (to the east and west of the Nile), (2) Fajelú, (3) Kakuák, (4) Marshia, (5) Nyambara, (6) Liggi, (7) Mandari, (8) Shir.

These divisions together form a sharply defined whole, and are distinguished from their neighbours by physique, customs, and language. It is true that fewer lanky men are found among the inhabitants of the mountains of Kakuák and Fajelú than among the Bari of the lowlands; the colour of their skin, too, varies greatly between dark brown and reddish brown, whereas the Shir, for example, are all of an almost exactly identical colour (No. 42 of Broca's scale of colours). But throughout all the divisions, the head is always of the same shape, so that a member of this group can be at once distinguished among hundreds of other Negroes. The temples are very strongly compressed just before the ears, so that the height of the skull is much increased throughout the whole length of the sagittal suture, owing to the approximation of the lower borders of the parietal bones. This is so marked that it alone sufficiently characterises the group. This is not the place to detail the anthropological material which I have gathered, as the Bari have often been described elsewhere. The language spoken by these eight divisions is perfectly identical, with the exception, perhaps, of a few words which have been imported from their immediate neighbours. This latter fact applies also to the Nyambara, although they live in the centre of the district occupied by the whole group, and therefore come less in contact with strangers than the other divisions. The influence

of outsiders is very marked amongst the Kakuák and Fajelú, who often wear a leafy dress, in imitation of the Makraká tribes, instead of the leather apron usually worn by the Bari. They are, however, conservative enough to retain their broad tails of cotton threads. Earrings, too, are worn by both sexes in the west, whereas they are very rarely seen in the neighbourhood of the Nile, and the Kakuák women alone wear a quartz pin in the lower lip. It may also be worth mentioning that, whereas the real Bari, the Shir, and the Mandari live in permanent villages, which, once established, are never abandoned, the divisions occupying the south and west have roving habits, and like to change their villages from year to year. The Marshia, who live in and around Rimo, and who are few in number, occupy a rather isolated position in the general group. Externally they resemble the Bari type, and are of very dark complexion, and they appear to be the remainder of a large tribe which in the course of time has been scattered. They live rather exclusively, and marry among themselves, or with girls they have bought from other tribes. They are very skilful and industrious smiths.

Passing by the chief *zeríba* of Rimo, which was encircled by bananas, and where ten to fifteen Danagla lived, we descended to Khor Geli, which flows into the Yeï, and crossed it by means of a swinging tree-trunk; its depth varies from six to eight feet, and it was thirty-two feet broad. An hour was occupied in getting the people and goods across the bridge, and we then ascended through a belt of sedges to the village of Maga, a Morú settlement in the Fajelú country.

Close by the village there is a very swampy depression called Dange, containing about three feet of water, and ending in a perfect wilderness of high grass, shrubs, and brushwood. Chief Woda's row of huts, Wandi, forms the boundary here between the Fajelú district and that of the true Makraká, whose first village, Poro, had a very pleasing appearance. Conspicuous among the cultivated plants were splendid Colocasias, manioc, and Helmia, and an abundance of tobacco. Threatening rain compelled us to camp at Chief Bandua's village, Abutú, which consisted of twelve huts, as many corn stores, and therefore as many wives. In the middle of the *zeríba* was a cleanly kept

space, with a smooth floor of red clay, used for house-work and dancing. The huts, which were much more roomy and larger than those in Fajelú, had walls of straw mats, plaited in the pattern of chess-boards, just like those I had formerly seen in Bufi; the roofs were bell-shaped. The thorn hedge which surrounded the village was overgrown with beans, one of which, having black seeds, appeared to be wonderfully fruitful, for each pod contained between fifteen and seventeen seeds. Yams were grown inside the *zeríba*. Goats, dogs, and fowls were the only domesticated animals visible. The goats were gaunt animals, having rather long legs and smooth nose and breasts. Most of them were white or brown; they are said to be very prolific. The dogs were small, of a very compact build, with erect ears and tails, the latter being curled at the tips; they were mostly grey or tan-coloured. The fowls were small, and had very bright feathers.

As the chief of the village was *hors de combat*, owing to a buffalo wound in his thigh, the sceptre was for a time in the hands of his first and very intelligent wife, who understood perfectly well how to command. All the beauties of the place, ornamented with masses of iron and a few leaves, honoured me by considerable attention, especially an old woman, who did all she could to attract my notice. I could not understand at first why she did it, but this was soon explained by my being told that the daughter of this old woman had been set at liberty by me in Amadi last year; she was one of the slaves I had found there, and she had returned to her mother. Before the huts were straw plates containing a great quantity of caterpillars, about two inches long, which, after being freed from their hairs and lightly roasted in the fire, are considered an excellent dish.

The brushwood near Abutú showed evident signs of a recent visit of elephants; they had certainly not improved our road, which, after leaving the village of Mbala, led past innumerable *zeríbas* and villages. I had never seen so many buildings together except in Ugánda, and the resemblance to that country was increased by the cultivation, for there were extensive fields of sweet potatoes, chiefly of the white-skinned species, and manioc grew everywhere, while bananas and tobacco were extensively

planted, and even the red Amaranthus and *Canna indica* were not wanting. The huts alone were different, and reminded me more of the true Nyam-Nyam style of architecture. In order to find a bridge—these people do not appear to love the water—we were led about four hours from the village, and had the pleasure of making the acquaintance of innumerable small chiefs, until at last we arrived at Khor Bándama, and having crossed it by means of a wonderfully simple bridge composed of two tendril ropes, our guides wished to camp in the village of Rémbeta. It was a clean place, with friendly people and extensive cultivation. I found here the beautiful Solanum which grows in Ugánda; its red cherry-like fruit is very tempting-looking, notwithstanding its objectionable taste; but if we had remained we should not have arrived at Kabayendi next day, so we determined to march on.

2. KABAYENDI AND THE MAKRAKÁ.

A BUFFALO-HUNT — LIFE AT KABAYENDI — IMMIGRANT ZANDÉ — SULTAN WANDO'S HISTORY—NATURAL HISTORY NOTES—THE MAKRAKÁ—IDDIO, THEIR TRIBAL DIVISIONS, CUSTOMS, AND QUALITIES.

THE country was cultivated as far as Khor Nambia, where ironstone crops up, but then followed a wilderness with a most extraordinary confusion and density of vegetation. It was almost impossible to breathe sometimes in the midst of the grass and brushwood. A tremendous noise was heard in the jungle—the natives were engaged in a buffalo-hunt, with nets and spears, as is customary here. After passing Khor Kurpio, we again entered durrah fields in which *zeribas* were situated, and we passed a broad, perfectly flat slab of gneiss lying across the road. It was late in the afternoon when we crossed Khor Au, a considerable stream of good clear water, and ascended to chief Barafió's large village of Ekúdeli, where we halted on account of the pouring rain. The chief, who came to welcome us, vanished almost immediately, pro-

bably thinking to escape a request for porters; so, after a deluge of rain, we were compelled to leave a number of our loads behind, to be forwarded later on, and we then continued our tramp through the mud, and crossing Khor Torre, a swampy runnel, we reached Ondebiri.

The chief, Gigo, is an old, grey-bearded man, very tall, with well-arranged locks and a pointed, waxed beard; he is a celebrated tippler, and was accompanied by fifteen portly Venuses wearing aprons of leaves. I noticed here again the luxuriant growth of hair which distinguishes the Makraká from their neighbours. It is seen in both men and women, and they construct most wonderful frisures by carefully arranging it in small plaits and locks, saturated with fat, gum, and red iron-clay. When their hair is let down, the Makraká women remind one forcibly of the Abyssinians, such as those seen in Gadaref. After a short march, we reached the road coming from Makraká-Sugáire, and then passed through fields, where a number of runnels had to be crossed. When we reached the station at midday, we were received by Nyam-Nyam playing upon musical instruments, singing Makraká, screaming Bari women, and the inhabitants of the village —a curious spectacle, which was rendered the more impressive by the appearance of the Indian elephants which marched up to greet us.

The *zeríbas* of Kabayendi cover a considerable extent of ground, which is usually cultivated, but having been exhausted, it is now left fallow for a time, and is covered by short grass. Few trees are seen, for they have been used up by the large population. Plenty of water can be obtained in Khor Menze; it is, however, coloured red, and tastes strongly of iron. On this account wells are dug at a short distance from the *khor*, and cold drinking-water is obtained from them, of a dirty white colour, and still tasting strongly of oxide of iron. The cultivation is as usual. In the officials' gardens, citrons, sweet lemons, papaws, figs, and Anonas thrive very well; they have all been imported here from Ladó. It is curious that the pomegranate, although it thrives well, never bears any fruit in Ladó; the only explanation I can give is, that the trees have been too plentifully watered. Onions and water-melons also thrive well.

We planted cotton for the first time this year, and from two *okkas* of seeds we obtained twenty *kantar* of good cotton, a result which certainly encourages me to go on with its cultivation. I am now going to try rice and indigo.

Kabayendi was established about twenty years ago by Debono's people, who came to this district from Atrush's station on the Yeï. They first settled to the north, in the Abukaya district, but were driven away by ants (termites), and then occupied the old station of Fadl Allah, on the river Embe. In 1877 they removed to this place, notwithstanding its bad water, as the fields near Fadl Allah had been exhausted. The population of Kabayendi is composed chiefly of Makraká and Bombé, some Abukaya, and a few Morú and Mundú. Bari (from Ladó) reside in small colonies all over the province. The true Zandē (Nyam-Nyam) are at the present moment very numerous, because Mbio's brother, Sultan Wando, having been driven from the Bahr-el-Ghazal district by Rafaï-Aga's bad treatment, sought refuge here with all his people, wishing to settle in our district.

I have offered him the unoccupied land to the south of Tomayá, and already messengers have been sent to gather his scattered people and to bring them here. According to the latest intelligence, Mbio himself, after a six months' war, and after he had destroyed all his ivory, has been captured by Rafaï-Aga and Hassan-Aga's soldiers, and taken to the Bahr-el-Ghazal, where he is now in captivity. I was going to visit him, but now my journey will be considerably shortened. I am sorry for this brave warrior!

Wando, well known to readers of Dr. Schweinfurth's book, is a well-built, athletic fellow; he has a dark skin and a completely shorn head, which distinguishes him from the other Nyam-Nyam, who think so much of their frisures. The *rokko* trousers of the Monbuttu constitute his only dress. He was accompanied by three of his fourteen sons, all wearing the handsome hide-dress of the Zandē, and tall straw hats decorated with parrots' feathers. The indispensable trumpeters accompanied them, carrying gigantic horns and trumpets made out of elephant's tusks and decorated by leopard-skins.

I noticed near Khor Menze, which flows into the Torre near

the station, a great number of fresh-water crabs (Telphusa), very comical, nimble creatures, who when approached at first show fight, but then run away. They are called by the Makraká *ugenne*, and are eaten by them, as indeed is everything that can be eaten. I also found a beautiful small snake; I had seen it before near Ladó, Fatiko, Latúka, and Fauvera, but have never found more than one at a time. It was the *Typhlops Schlegelii*, formerly only found in Mozambique; it appears, however, that this graceful animal is extensively distributed throughout Central Africa. Several specimens of the Georychus were brought to me; they are very common in the Dinka district, but the variety found here appears to be rather larger and of a darker grey colour. The most common bird seemed to be the *Spermestes cucullatus*, which builds its nests in the high straw roofs, and in this country appears to take the place of the Lagonosticta. A large Hyphantornis was also found; it is certainly a new variety, but is probably related to the *Hyphantornis Gucrini*. A long stay here would probably enable me to make many new discoveries. The whole of the immediate neighbourhood of the station has been devastated by elephants.

In the foregoing pages I have often made use of the name Makraká in order to designate the peculiar people who have pushed themselves in between the northerly tribes. I must, therefore, mention here that this name, which is accepted on all sides, is not their original patronymic, but a nickname which has been given to these cannibals by the original occupiers of the country. About four generations ago, four Zandē tribes, the Iddio, Bongbé (Bombé), Apágumba, and Abángminda, tired of the constant oppression of their own chiefs, left their homes, which lay far to the west-south-west, and made their way towards the north; the rumour of their cannibal propensities, which spread far and wide, rendered their advance easy. I have already mentioned that on their trying to enter Fajelú in the east they were driven back. They then settled in their present quarters, and thence rapidly extended. The Apágumba and the Abángminda, who have an idiom of their own as well as the common Zandē language, being numerically small tribes, blended with the Bongbé and Wando's Zandē. The Bongbé

and the Iddio, on the other hand, maintained their separate existence as distinct tribes, as also their tribal peculiarities, and form to-day, the former under their own name, and the latter under the name Makraká, a most valuable portion of our population, owing to their industry and trustworthiness.

The Iddio (Makraká) living in the province of Makraká, include ten divisions, each ruled over by an hereditary chief, namely, the Akbayá, Ndábiri, Rembeté, Wámberi, Bondua, Agbatú, Mbédimo, Abate, Akudeli, and Avúngodi. These divisions have many subdivisions (the Agbatú, for instance, counting ten), each of which is ruled by an hereditary sub-chief, in addition to whom each village has its superintendent, who is appointed by the chief of the district, and can be deposed by him at pleasure. The Iddio do not recognise any universal chief; disputes are settled by the superintendents of the villages, and questions of great importance by the superior chiefs. I cannot say whether any other relation exists besides their common origin between our Iddio and those who live far to the south-west. The Iddio-Makraká are still a hardy hunting people; they have, however, in the course of time, improved their methods of agriculture in a way hardly seen in any other tribe. The plants which they brought from their own country form even now their staple crops; two of them, the Colocasia and manioc, give to the Nyam-Nyam villages a very characteristic appearance. Throughout this region these two plants are only extensively cultivated in Ugánda and by the Zandē tribes, and if specimens are met with in other places, it is, as a rule, easy to say where they come from.

My endeavour to introduce cattle-breeding amongst the Makraká only led to one result—they immediately ate all the cows I gave them. The true Makraká will eat everything, it matters not what it be, from the elephant to the wild cat, from the enormous python down to the fat grubs in the rotten wood of a dead tree; everything that moves is eaten. Our porters carried with them on the march (hanging to their arms) mouse-traps made of twisted split reeds, and when we reached our night quarters they had no sooner laid down their loads than each man was busily engaged setting his trap. Although the Makraká often marry women from the neighbouring tribes,

they always remain true to the Zandē peculiarities, habits, and customs; therefore the difference is all the more remarkable which exists between their women and the women of the true Zandē, who are of the same original stock. Whereas the Zandē women possess an extremely retiring and modest disposition, are hardly to be seen upon entering a village, and are greatly respected by their husbands, although they have no women's rights besides those of performing their household duties, the Makraká women rule the roost and possess every freedom. As soon as you enter one of their villages, the women, who are mostly tall and of a very powerful build, attract attention, and it soon becomes evident that they speak the last word in the affairs of the village. They are, nevertheless, good, industrious workwomen, and are very much attached to their husbands. I must, however, refrain from touching on the subject of family life, although many interesting customs obtain here, for Dr. Junker, who has lived for a considerable time in this country, will of course be able to treat of this subject in a more thorough and detailed manner than I could possibly do after a stay of only three days. I will only say, therefore, in conclusion, that the dialect spoken by the Makraká-Iddio differs very little from that spoken by the remainder of the Zandē, with the exception of a few isolated names for plants and animals. Their love of music and enthusiastic pursuit of it are the same as amongst the other Zandē tribes, and many of their magic practices are also identical. They are likewise excellent smiths and workers in iron, and their elegantly formed knives and delicate wirework are models of excellent workmanship.

12. Through the Abaká Country to Gosa.

TOMAYÁ—LUXURIANT "GALLERY" WOODS—THE MPAFU-TREE—THE ABAKÁ—GREAT COLD—CHIEF ANSEA—ATROCITIES OF THE DANAGLA—NATIVE SELF-HELP—THE BABUKUR—GOSA—COTTON-WEAVERS.

After leaving Kabayendi, we wandered through a very hilly country, in which many gneiss peaks were to be seen, to the pretty little village of Mindi, where, from the top of a high hill, I obtained a good view over the rows of the Abukáya mountains, which lay to the north. The chief of the village was an intelligent fellow, so that I was able to obtain from him the real names of the mountains, the Nyam-Nyam generally being accustomed to give the name of the nearest chief as that of the mountain (for instance, Mbia Maloguma, the mountain of Maloguma). Large stretches of land, over which the road then led, were lying fallow, for the people only cultivate the land for a couple of years at a time. I noticed again here huge boulders, at the foot of one of which Khor Horó flowed, hidden between thick masses of reeds. This *khor* forms the boundary between the Makraká and the Abaká, who, it appears, are not always good friends. An almost treeless flat, overgrown with fine grass, extends from the foot of the hill of Bádia to Khor Asa, a clear mountain stream, which forms at the ford a small waterfall. Its water, for a wonder, did not contain iron, so that, after the mineral waters we had had to drink for some days, it was very refreshing. The small station of Tomayá, so named after the chief of the surrounding Abaká, lay at a few minutes' distance uphill.

It may be well to mention here, that since Dr. Junker travelled in this district, nearly all the chiefs and villages which he mentions have changed their positions, with the exception, of course, of such places as Wandi, Kabayéndi, Rimo, and Ndirfi, which have become permanent Government stations.

The scenery around Tomayá is diversified; rocks, wood, meadows (if I may use this expression in Africa), and flowing waters fringed by bush, make the place a rich storehouse for the collector. I found here many species of birds for the first

time. Amongst them was a beautiful widow-bird, as black as velvet, and a new and very graceful pigeon, of which I had already obtained specimens in Janda. Small quadrupeds were also numerous. Hundreds of black Clausilia-like univalve shells of two species were lying upon the moss which covered the rocks in Khor Asa; curiously enough, all of them had lost the point of the spiral, and although I examined more than two hundred, I was not able to obtain a single perfect specimen. None of the inhabitants of the village could be seen, for, as Chief Ansea subsequently complained to me, the Abaká of Tomayá are of a rather intractable character.

I had been told that the station of Kudúrma was so far distant that two days' march would be required to reach it; we therefore collected our porters early, and before dawn, with the threatening comet above our heads, we descended the steep declivity leading to Khor Anje, which was hidden in durrah-fields. The ascent was just as steep and precipitate; then, marching along a ridge of hill, the rubble of which was thickly covered with white and yellow lichens, we enjoyed an extensive view over an exceedingly undulating and fertile land, in which were many high hills, whose naked outlines stood out above the green foliage like fortifications. Villages surrounded by their corn-fields lay in the depressions of the country far below us, often hidden by rolling veils of mist. The fresh cool morning air, the perfume of the plants and of the burnt-down grass, the echoing song of the birds, and the flashing golden tints of the rising sun combined to produce in the traveller a feeling of buoyancy.

I noticed in the steppe which we next passed through many groups of trees growing like islands in the broad expanse. The path led in the direction of what appeared from the distance to be a line of dwarf trees, but which were in reality the tops of trees which grew in a hollow, their summits only reaching to the level of the plain. A very deep descent revealed the wonders of a "gallery" wood growing in a great depression, of the same character as those so often seen in the south. The trunks of the trees rose to a height of some hundred or hundred and thirty feet before their crowns unfolded. One of these "gallery" woods, through which Khor Modzua

flowed, was extremely interesting to me, owing to a species of Pandanus, which was growing in a peculiar manner, some of the plants having shot up to a great height before spreading out their fans, whilst others resembled enormous reeds, dividing close to the ground, and forming an impenetrable hedge along the *khor*. The hook-like thorns on the edges of the leaves and on the under surface of the midrib were very sharp and dangerous to the skin. This plant is called by all the Zandē *boddumó*, by the Abaká *bakivé*, and by the Mundú *langa*. This appears to be the most easterly point of its distribution.

The village of Langáza, a Bongbé settlement, is surrounded by durrah-fields; its inhabitants had fled, but were seen peeping out from behind the bushes. It is curious to note that the people here sow eleusine and Hyptis amongst the durrah. I noticed in the "gallery" wood near Khor Langa an old friend in the gigantic tree called in Kigánda, *mpafu*, and which, according to Cameron's book, is known under the same name on the west side of Tanganyika. In Abaká this tree is called *obbi*, in Mundú *abbi*, in Zande *mbiri* or *mbili*, in Makraká *bino*, and the use of its sweet-smelling resin and of its reddish compact wood, as also the extraction of its red oil from the green husks, are known here. Two of the trees I saw were very large, but not so gigantic as those seen in Ugánda.

Khor Langa forms the boundary between the Abaká and Mundú countries. The "gallery" wood at Khor Kráfa, which takes about twenty minutes to cross, surpassed in beauty and in luxuriance of vegetation any I have hitherto seen. In the deep twilight, to which no sunbeam penetrates, ferns, Calladias, Acanthus, and Capparidaceae rivalled each other in the vigour of their growth. The stream foamed over the moss-covered stones in silvery white cascades, and high up in the trees the white coat of the *Colobus guereza* flashed now and then through the thick entangled foliage. After a short march through the steppe in which these *khors* are situated, we arrived at an early hour at Khor Aïre or Ire, which had a dense barrier of reeds. Its water was of a yellowish colour, and the opposite bank of the river flashed and glittered with mica. After twice fording this *khor*, we reached the station of Kudúrma, which lay to the

west of the high hill of Mungo. The country is here crossed in all directions by rows of hills, sometimes of considerable size. Khor Aïre flows in a sharp curve towards the north, at a few minutes' walk from the very prettily situated station. Its banks are lined by beautiful woods, in which a great deal of rattan (*Calamus secundiflorus*) grows, having large fruit panicles. This plant, which is called by the Zandē *poddu*, and by the Mundú *akká*, provides the people with good material for basket-work in its fine feathery fan, and its stalk, after being split and freed from thorns, is plaited into beautiful shields.

Crossing a hilly, scantily wooded steppe, broken by many swampy depressions which drain the country towards the north, our path led, after passing the swamp of Bópara, out of the Mundú country into that of the Abaká. The language of the latter is more nearly related to that of the northern tribes, whereas the Mundú have penetrated here from the south, and their nearest relations are the Mumberi or Momi, who live near the Welle. I noticed that the steppe was covered by numerous boulders; they were sometimes broad slabs, sometimes round Mamelons, just like those I had seen farther to the north, in the Mittu district. They were occasionally quite bare, but in other places covered with sparse vegetation. Khor Mekke and Khor Edi were the largest watercourses we met with; both are sources of the Yalo. The bed of the first was composed of bare rocks, while the second flowed over yellow sand. Khor Edi was partially bridged over by a tree-trunk. From this point the rise of the ground became more apparent, but there were still many swampy places, through which we had to wade, until we reached our station of Kanga, which is built in the fallow fields surrounding the *zeríba* of the district chief.

We had suffered considerably from cold during the last few days; as a rule the thermometer registered in the morning at six o'clock 62° Fahr., which to us was a Russian temperature, used as we were to the heat of the lowlands. In the mornings our whole party, blacks, whites, and browns, sat round the fire to warm our hands. Khor Edi flows quite near the station; a granite dyke running across it causes a large rapid. Wherever flat slabs of rock did not prevent the growth of vegetation, there were broad impenetrable Pandanus thickets, inhabited by

Aulacodus Swinderianus, which are much hunted on account of their tender flesh. An otter (Lutra) is said to be found farther up-stream; I often saw the natives wearing pieces of its skin. The steppe cat (*Felis maniculata*) is also said to be very common all over this district. Three female cats were given to me in one day; they were very nice, dusky-grey creatures, with a few greyish-black stripes and white paws; notwithstanding their small size, they spat horribly as soon as they were touched. It would be interesting to send a pair to Europe in order to see what influence the climate and food would make upon the second and third generation. The European wagtail (*Budytes flava*) had already come back to its winter quarters.

Chief Ansea, the ruler of the Abaká of Kanga, affects a greasy fez and a long Tibet robe, green with age, as also wide Turkish trousers, of a colour very difficult to describe; but although his authority extends far and wide, and many Negroes obey his commands, he has not yet been able to afford a shirt; so it was my first business to renew his outer man, after which, on account of his light brown skin, exceedingly straight profile, scanty full beard, and his classic Sudān Arabic, he gave the impression of being rather an inhabitant of Dar-Mahas or Batn-el-Hajr than an Abaká prince. His *zeríba* consisted of about forty huts and granaries, and as many very ugly women, with such enormous plates inserted into their lips that they almost looked like broad beaks. This, together with the undulating movement of their hips when walking, called to my mind very forcibly the spoonbill. The people here carry a perfect arsenal of iron upon their bodies.

As the ground round Kanga is exhausted, Ansea intends shortly to remove his village to the Khor Merídi. This *khor*, which is now a stream of from two or three feet in breadth, is usually seventy feet wide. Farther to the north it is called Roā. It was about two and a half hours' march from Kanga. Masses of reeds and canes grow on the red ferruginous mud, where they appear to thrive. The other head-stream of the Roā, the Rasubá, also flows over this same ferruginous mud, which, in addition to the broad fringe of Pandanus, adds considerably to the unpleasantness of the ford. Iron appears to be very plentiful in this district, for I found that arrow-heads made of

iron are used here as articles of currency, and are exceedingly sought after by the surrounding tribes. In the steppe-wood which grows between these two watercourses, I noticed very many specimens of Sarcocephalus, with ripe fruits; also several species of Vitex, the fruit of which was just beginning to ripen. Khor Aoa is about a hundred feet broad; it has a muddy bed, composed of yellow mould, and is enclosed in broad "gallery" woods. The ford must once have been very difficult, for the people have tried to construct a kind of bridge, by heaping in the river cut grasses, upon which the traveller sinks over the ankles.

We camped for the night at Bága, which is now inhabited by Zandē proper, who have for long contended with the robber bands of Sabbi. Abdullahi Abd-es-Sammat, an unworthy nephew of his open-hearted uncle, does not content himself with robbing and plundering the whole of this district from his *zeríbas* at Sabbi and Kanna, but also tyrannises over the people by cutting off their hands and feet for his private amusement. It was on account of cruelties of this kind, and the panic which they had raised amongst the inhabitants, that I visited them, for their complaints to the Government of the Bahr-el-Ghazal district had not been attended to. This was only to be expected, for there the officials are all brothers or cousins.

Leaving Bága, we crossed many steppes, *khors* edged with broad "gallery" woods, and swamps containing the abominable Vossia grass, until we reached Jebel Ngiruá, where I utilised a short halt to ascend it. After treading down the grass, I was able to obtain a view from its summit as far as Jebel Baginze, but the names I heard for the different points of interest did not exactly tally with those given to Dr. Junker. This is probably to be explained by the fact that he appears to have had Nyam-Nyam interpreters, whilst I had Abaká. On the other side of Jebel Ngiruá, well-wooded country gradually sinks to Isu, or Echu, as it is here called. As I did not wish to waste my time in idle words, I preferred not to visit the stronghold of the Danagla, which was situated upon that river, but took the road which led past burnt *zeríbas* and devastated fields to the village of Ombamba, where we halted. The mes-

sengers whom I sent to the *zeríba* to fetch its commander returned, bringing with them Chief Endauia, accompanied by most of the people who had been the greatest sufferers, and I ascertained from them that when a rumour of my approach arrived two days ago, the robbers decamped during the night with all their treasures, and that the *zeríba* was now deserted. I at once gave orders for the erection of a station here to guard the frontier.

Chief Ranga, of the Babukur tribe, owns this exceedingly fruitful district; he appears to depend in a measure upon the more powerful Ansea. The latter's eldest son rules over the Babukur who live round Jebel Mogille. They are an ugly people, of a deep black colour; their upper lips are pierced, and in many cases their ears too, and they possess even a worse reputation for cannibalism than the Monbuttu themselves. I noticed that eleusine, sweet potatoes, Colocasias, yams, Helmia, and a little durrah were cultivated. The huts and granaries were in shape like those of the Nyam-Nyam, but less graceful. The language of the Babukur, as well as their appearance and their universal custom of circumcision, reminded me forcibly of the inhabitants of Londú, in Kabréga's country, who have also migrated from the west. A Sterculia is common here; the Abaká manufacture a coarse cloth from its bark, which they use for aprons.

It was impossible to do all that I had intended here, on account of Mbio's capture and the flight of the robbers. A long stay would have been useless, so, with a heavy heart, I commenced my return journey. The old road was taken as far as Merídi, but from there we struck out in a new direction to Gosa. The country we traversed rose gradually, and several low ridges of hill crossed our path. Large pieces of beautiful white quartz are scattered over these ridges. The people manufacture the long pins and broad plates which the women wear in their lips out of this quartz by rubbing one piece against another. After passing Ngéle, a miserable village, where we could obtain no durrah, but got some very good yams, we marched through a district having an exceedingly wintry aspect, and containing many deep swamps, to Moggú, a large village, where Ansea's brother, Falongo, resides. Thick Ano-

geissus groves surrounded the village, and swamps of *Turtur albiventris* fluttered about among the huts, apparently filling the place usually occupied by the *Turtur semitorquatus*. Falango, a celebrated tippler, appears to exact prompt obedience from his people, for the porters we requested were at once forthcoming, and he insisted upon accompanying us himself to our next night's quarters.

The next stretch of country was covered with boulders, and there were many small peaks. Tobacco (*Nicotiana Virginiana*) is extensively cultivated in this district, and used, as elsewhere, for smoking, whereas the *N. rustica*, with the yellow flowers, is mostly chewed. A row of lofty mountains running from south to north was visible from the top of a flat gneiss slab on the hill of Asála. I took compass bearings of the peaks, but was not able to obtain their names, for the mountains lie in the Abukaya country, and the Abaká who were with me do not travel. Corn and tobacco, sesame and *mrisa*, exist in their own country, and they obtain their clothes from the *dibbi*-tree; Justus Perthes's Institute is unknown—why, then, should they travel?

The swamps on our road were very frequent, and generally knee-deep,—sticky, muddy beds, having nice-sounding names, but being very unpleasant realities. We saw the red-headed dwarf parrot (*Agapornis pullaria*) in swarms, twittering in the durrah and eleusine fields. Notwithstanding the great beauty of this bird, it is much disliked by the inhabitants on account of its destructiveness. We passed Chief Burúngulu's new *zeriba*, Ambereko, situated upon a high hill, the flanks of which were covered by durrah-fields. A well-cultivated plain stretched out on all sides, except in the east, where the Abukaya mountains formed an apparently continuous wall. The march from here to the station of Gosa was short but noteworthy, for an incident occurred showing very clearly the present condition of this country. Two Danagla from the Bahr-el-Ghazal had recently come to Ndirfi, but, disturbed by my presence in the neighbourhood, had endeavoured to cross the frontier at night with five or six slaves. The Negroes living here had, however, defeated them, and put them in slave-yokes (*sheba*), in order to lead them to me. It is certainly a

good sign that such a thing can happen in the country without a disturbance.

The Aïre, or Ire, as the Yalo is called here, is about sixty-five feet broad and three and a half feet deep at the ford. The banks, which are not wooded, slope gently down to the rushing water, which is broken by ledges of rock.

Gosa, the central station of the Abukaya country, was only raised to the rank of a station a few months ago. It is admirably situated for watching the road from Monbuttu to the north, and those leading to the district of Rōl and to the Bahr-el-Ghazal. My experiences last year in Amadi proved the necessity of this surveillance. Cotton has thriven so well here that it has given rise to the industry of weaving, which will probably be of considerable importance in the future. The inhabitants—at present only the Danagla and their servants—weave the light cotton stuff known throughout the Sudān as *damur*, which is so very well suited to our climate. It is better made here than I have ever seen it in Khartúm. Gosa lies so low that I was unable to obtain views of either mountains or hills, and a platform which I constructed for the purpose proved of no use. The surrounding land had been denuded of trees, and the steppe was covered with burnt grass, so that I could not add to my collections. Even the birds which I noticed or obtained were hardly worth taking trouble about.

13. From Gosa *viâ* Abukaya and Makraká-Sugaïre to Wandi.

THE PAPAW-TREE—A ROUNDABOUT WAY—TROOPS OF MONKEYS—GRANITE HILLS—EXTENSIVE DURRAH-FIELDS—AFRICAN STILL-LIFE.

Climbing slowly out of the depression in which Gosa lay, and passing through a very wild bushwood and by many scattered villages, we reached the first of the low ranges of hills of which the highest point is named Luttu; it lay at a short distance to the left of our path, and near the small village

of Lutomba. From this point, as far as Khor Allo (Junker's Ollo), there was a steppe, crossed by many swampy water-courses. There was a little wood in some places, chiefly composed of the small-leaved Anogeissus, and the usual species found on a steppe. The Allo itself was fifty-five feet broad and five feet deep; it joins the Aïre farther to the north, and these two streams form the Yalo. On the rising ground near this stream lay the Abukaya station of Manda, surrounded by a blooming garden, in which I noticed a number of Papaw-trees amidst the usual vegetables and fruit. A short march led us from Manda, over many rocky hills, to the foot of the mountains, and then, instead of following the old and certainly fatiguing road between them, which was the shortest route to our next station, my guide determined to go right round the mountains, in order not to tire me! Of course it did not matter to him that we lost a few hours by so doing. We therefore followed the apparently never-ending mountain chain towards the south and south-east, marching over its spurs, which jut out into the plain and form ravines and precipices, and going through canes and reeds, under a burning sun. After a four hours' march, we halted for a short rest on the other side of Khor Mendé, which was almost dry, but our guides would not let us stay long, as they said we had still far to go, and they were perfectly right about that!

I noticed upon the bare flanks of the mountains luxuriant copses of a plant having the general form of a euphorbia. It was new to me; about forty inches high, it had wing-like appendages upon its four-sided stalk, and its flowers were red, like an aloe. Large troops of Cercopithecus were climbing about the rocks, led by a white-bearded male; they were not at all shy. Many small *khors* with clear flowing water coming from the mountains had all a southerly direction. At midday we had at last left the mountains behind us, at least the great chain, and had entered cultivated fields, in the midst of which the station of Alugánya is picturesquely situated. It is the most northerly station in this part of the province of Makraká. Unfortunately it was impossible for me to stay here, as pressing duties caused me to hurry forward to Wandi.

I observed near here the granitic hills with broad white

quartz stripes which I have so often mentioned before. Many swamps, overgrown with cutting grasses, made the march to the station of Embe, or Nembe, very unpleasant. There were extensive acacia groves in the neighbourhood of many of these swamps. Elsewhere in Makraká the acacia is rather rare. Khor Embe has a breadth of about a hundred feet; the water is about forty inches deep and full of sunk stones. To the right and left of the ford it was covered with a broad growth of papyrus. From the large open space which lay before the huts of the station, I obtained a very good view over the mountainous country, with its many heights and peaks of which I had now to take leave; for the road slopes from here into the lowlands, and only once more, at the top of a high ridge of hills, was I able to catch a glimpse of the blue mountain peaks. The durrah-fields, through which we marched, were very extensive; one field joined another, occasionally intercepted by small zones of wood or by a strip of high steppe-grass. The only broad strip of savannah we passed forms the boundary between the Abukaya and the Makraká, whose district we again entered. For more than an hour we went through durrah-fields, till, after a long hot march, we arrived at the village of Baginmanya, where the chief received us hospitably. Our luggage had remained far behind, and only arrived about sunset, so that I could not think of work, and occupied the time by a stroll through the fields.

The road from here to Makraká-Sugaïre is really only a path leading for three hours through fields of durrah, Hyptis, tobacco, sweet potatoes, and Colocasias. On account of the numerous *zeríbas* surrounded by neatly kept fields, the neat huts, the trees hung with bundles of maize-cobs and other seeds, the many nets and lines for catching game, the numerous Tephrosia bushes for catching fish, this part of the country presents a very homely, hospitable appearance, which is borne out by the polite and friendly demeanour of its inhabitants. Close by the big Khor Torre, which we crossed in a boat made out of a gigantic trunk, lay the *zeríba* of Makraká-Sugaïre, where we found the huts we had occupied two years before still standing. As at that time, the brilliant sunbirds buzzed round the flowering citron and Papaw trees; as then,

the yellow-backed widow-bird climbed about the grass; as then, Khor Torre rushed by—but the master of the house, who had taken such a pride in these gardens, and who had hospitably kept an open house for every needy one, was sleeping beneath the sod.

After a day's rest here for the sake of the porters, the march was again resumed. On my former Makraká journey, in August 1880, we had hardly found water enough to drink along this road; now, however, in November, in consequence of very heavy summer rain, all the pools were full, and most of our time was occupied in wading through mud and water. From the durrah-fields we heard the cry of the boys stationed there to frighten off the elephants competing with that of hundreds of frogs which croaked by the side of the road. The bridge which spanned Khor Bándama, a tributary of the Torre, had been destroyed by the high water, which we had therefore to ford by a ledge of rock which stretched across its bed. The steppe commences just behind the Bari villages near this *khor*. It is composed of grey loamy soil, overgrown with high grass and a few trees, and crossed by many *khors;* it would probably be worth cultivating. We next reached the stony rubble which is scattered over the ground near the station, and then, after passing several watercourses near which bananas were cultivated, we entered the station of Wandi, the oldest village in the province of Makraká. At this place my route joined that which I had previously laid down, and this year's excursion came to an end.

VI.

ON THE GEOGRAPHY OF PLANTS AND ANIMALS.

1. The Acclimatisation of Various Domestic Animals in the Equatorial Nile Region.

(Letter to Professor G. Schweinfurth, dated Ladó, December 25, 1881.)

You ask after the elephants.* There are three of them, and they are stationed in Makraká, but are scarcely used for transport at present, for want of fit persons to attend to them. It was the greatest mistake that Gordon could have committed, for the sake of a few guineas, to send back the attendants that came with the elephants from India, before they had trained other proper attendants, and to entrust them to Shíluk soldiers, who, like all Negroes, have no interest in animals except as articles of food. Besides, the elephants arrived here at the time of the block in the river, when I was cut off for eighteen months from all communication even with Khartúm, and had quite enough to do to preserve myself and my people from destruction. In spite of most liberal promises to the Negro chiefs, I have not yet been fortunate enough to procure any young animals. I have no doubt that, with sufficient care and a staff trained for the purpose, elephants would save us much of the continual annoyance from porters.

The camels are doing well, and keep up the postal service between Ladó and Rejaf. They will be useful to me in those districts where there are tracts without much water. Donkeys can only be used for a few years; even those from the Langó

* The Indian elephants (six in number) were sent by the Khedive Ismail from Cairo to the Sudān. They travelled the long distance of two thousand miles uninjured, swimming the Nile six times.—G. S.

district (where they are kept in herds for the sake of their milk) do not last long. One of my favourite schemes is an attempt to acclimatise buffaloes, which, in my opinion, would be well suited to the country. Unfortunately I have not yet been able to procure any tame buffaloes, and those in this country, even when they are caught young and grow up with the cows, are always rather wild. Two two-year-old cows are here at the present moment. I have introduced rabbits, which are doing well, and promise to thrive. A large duck thrives, and multiplies in a remarkable manner; it is similar to the so-called Turkish duck; I bought the original birds from the Zanzibar Arabs settled in Ugánda, and they have spread over the whole of our province, just like the Papaw-tree. Pigeons do not thrive everywhere, chiefly owing to the numerous birds of prey, which decimate them.

2. Zoo-Geographical Notes.

GEOGRAPHICAL PROBLEMS OF THE AFRICAN TROPICAL FAUNA—LIMITS OF WALLACE'S ZOO-GEOGRAPHICAL REGIONS—MIGRATION OF ANIMALS AND ITS CAUSES—AFRICAN AND EUROPEAN BIRDS OF PASSAGE—DIVERSITY OF THEIR MIGRATIONS—SOUTHERN LIMIT OF EUROPEAN VISITORS—MIGRATING FISHES—GREAT LINE OF SEPARATION FROM SOUTH-EAST TO NORTH-WEST—THE REGION OF STEPPES AND FORESTS OF THE BAHR-EL-JEBEL—ANIMALS CHARACTERISTIC OF THE STEPPES AND FORESTS—THE GEOGRAPHICAL DISTRIBUTION OF THE GREY PARROT—THE CHIMPANZEE—SCARCITY OF BIRDS OF PREY.

Ladó, *December* 1884.

The study of the tropical fauna of Africa has in many respects peculiar claims on our attention; for, in the first place, forms most closely connected with those characteristic of it at the present time, appear in the miocene deposits of Europe, so that this fauna occupies a most exceptional position as regards its antiquity, geological antiquity I might say, compared with the existing types of later date. And, indeed, the camelopard, hippopotamus, Orycteropus (Cape ant-eater), and others belonging to a period of creation long passed away, intrude as anomalies into our times. But it is not antiquity alone

which lends a charm of their own to such considerations; various and manifold are the unsolved questions relating to the distribution of individual families, the physical conditions which have brought about their migrations, the apparently spontaneous appearance of forms in places where they are separated from all their relations by large tracts of country, and finally the coincidence or otherwise of faunistic with floral regions.

Whereas the almost total absence of palæontological evidence from Central Africa renders it impossible to enter upon questions of evolution, and the very incomplete acquaintance with even the existing animal life of this region permits as yet no generalisations, it is the more desirable to compensate in some measure for this deficiency by work in detail. First and foremost in this work is, of course, the compilation of accurate special lists for circumscribed divisions of the country as a basis for a general survey. The material for such work is only gained by diligent collecting. But another exceedingly profitable task offers itself to the explorer in the application of the collected facts to zoo-geographical purposes. Wallace has defined the zoological provinces of the African continent with a master hand, and, on the whole, there is nothing to alter or find fault with in his arrangement. We have next to ascertain how the boundaries of these provinces are situated with regard to one another, at which parallels of latitude and longitude the transitions take place, and whether they are sharply pronounced or become gradually perceptible. As a matter of course, there are numerous questions connected with this inquiry concerning the relation between the physical formation of the country, its vegetation, and its fauna.

While, from what has been said, it is evident that a large and productive field awaits the worker, it must be clearly understood that the following lines, which relate to a very limited region, are only an attempt to contribute some little to the solution of debated questions, and that they were written in the heart of Africa. Moreover, the data given are confined chiefly to ornithological facts, because the birds of the country have been more thoroughly investigated than other animals.

If migration be taken in its widest sense as a periodical

removal from one place to another, it may be asserted that the greater part of the animals of Africa are forced to make such changes. The difference in the commencement of the rainy season throughout the grassy or wooded uplands, both north and south of the equator, naturally influences the ripening of fruits and the development of insect life, upon which the higher classes of animals depend for subsistence. Hence arises the necessity for the latter to leave tracts which are beginning to get dry, and to go in search of others which yield the necessary means of subsistence in greater abundance. A good example of this wandering caused by the necessity of finding food is afforded in the *Chrysospizza lutea*, Licht., which frequents the steppe in flocks at the first commencement of the summer rain, and builds its nests in the acacia brushwood, but, as soon as the steppe becomes withered and dry, collects in small companies and removes to the banks of the larger rivers and brooks, visiting even towns and villages. These birds may thus be seen in the winter months by hundreds in Khartúm, together with *Passer domesticus*, L. The same is true of some weaver-birds. It is, then, quite natural that, when the steppe yields no more food, its feathered inhabitants should retire, in part at least, to the south, where an abundant feast awaits them. I mention as a well-known example *Hyphantica æthiopica*, Sund., which in summer frequents the tablelands of Kordofan, Sennār, and Takale, but in the winter chooses for its abode the region between Sobat and the 4th parallel of N. lat., because the beds of rushes in this tract supply suitable dwellings and food. But besides the need of food, which causes birds as well as all other animals to change their residence, it must be remembered that limited districts, which are able in ordinary times to harbour a certain number of birds, become too small for them, particularly in the breeding season, because, on the one hand, each pair demands a larger space, and on the other, the consumption, of insects especially, is considerably increased. Hence results a movement which in our territory is chiefly from south to north, though migrations to the south are not unknown.

It would be superfluous to give examples of this movement from south to north; all that have hitherto been called African

birds of passage belong to this class. It will therefore suffice if I refer to the *Poliornis rufipennis*, Strick., a bird of prey; to Eurystomus, Merops, Hyphantornis and Euplectes, besides Chrysococcyx and Oxylophus, and many waders. It will be more interesting to call to mind a variety which periodically disperses to the south as well as to the north, such as *Coturnix Delegorguei*, Delg. Like many other birds, this elegant quail seems to have its proper abode in the district lying between the lakes, for I was able to collect specimens of it there all through the year, both hatching their eggs and also as young and fully grown birds. Their proper home may be considered to lie between the third parallels of latitude on either side of the equator; from this region however, large flocks start on their migrations to the north and south; to the north when the summer rains clothe the steppes with verdure and food is not wanting for the young ones, to the south when the country in the north is bare and scorched, and when in their proper home a scarcity of seeds arises from a short period of repose in the vegetation. So we find these birds in February in South Africa, even beyond the 25th parallel, while in September they collect in Kordofan under 14° N. lat. *Turnix lepurana*, Sm., also seems to make rather distant migrations. But, with regard to all these movements, it must be remembered that though large numbers of the birds mentioned leave their proper haunts for certain periods, as many individuals and pairs remain behind as can find subsistence without too much difficulty. And herein lies the chief difference between such local wanderings and those of the real birds of passage from other continents, which change their quarters temporarily and periodically without leaving behind any individuals of their kind except those that are sick or incapable of long flights. Moreover, these movements among our birds are almost exclusively confined to the inhabitants of the brushwood and the steppe, while the occupants of the real forests never change their dwellings, at least with very few exceptions.

Now, while we cannot speak of real migrations among our indigenous feathered tribes, Europe and Asia send us a considerable number of guests; many of them remain in the northern part of the continent, but a large number reach the

tropics in their flight. Singularly enough, these are not always the most active flyers. I have been able to collect corn-crakes (*Crex pratensis*, Bechst.) even by the Albert Lake at about 2° N. lat.; but those that come as far as these regions are almost without exception feeders on insects, while the feeders on corn are wont to stay farther north. Wading and swimming birds are also comparatively poorly represented. What laws regulate the diffusion of these winter guests, why particular varieties push on so extraordinarily far towards the south, while others, though physically stronger, remain far behind them, are at the present time unsettled questions; only when we are in possession of observations extending over many years, and of special data concerning the distribution of the wanderers during winter, with constant regard to the climatic conditions of this country at the time of their arrival, shall we be able to form an opinion on this question. For the present it is our duty to confine ourselves to the registration of facts, such as the occurrence of the nightingale (*Luscinia philomela*, Bechst.) in Latúka and Makraká, of the redstart (*Ruticilla phœnicurus*, L.) in Rejaf, west Makraká, as far as 4° N. lat., and of the reed warblers (*Calamoherpe arundinacea*, Gm., and *C. palustris*, Bechst.) as far even as 2° N. lat.

On the other hand, storks and cranes never reach us, and in the course of years I have only once collected a specimen of *Ciconia alba* below 6° 35′ N. lat., which no doubt had lost its way. The same winter the Egyptian vulture (*Neophron percnopterus*, L.) and *Himantopus autumnalis*, Hass., were common here, though they do not appear every winter; it may, therefore, have been due to an abnormal winter in the north. With regard to the arrival and departure of birds of passage to and from this country, it may be remarked that the end of September and October are the months in which they arrive. Thus in the present year the yellow wagtail (*Budytes flava*, var. *cinereocapilla*, Sav.) was first noticed on October 9th. The time of departure is protracted, and falls between February and April. On April 21, 1884, I caught a cuckoo (*Cuculus canorus*, L.) in Ladó.

We have as yet scarcely any information about the movements of other classes of animals in the tropics. That migra-

tions actually take place among the fishes for spawning purposes, I was able to convince myself at the rapids of the river Rōl, near Mvolo, where twice a year a movement of immense shoals of fish goes on up and down stream, an occurrence which is well known to the natives, and much desired by them, for it supplies the country far and wide with fish. I observed the fish moving down to the north at the end of October, while the contrary movement takes place, according to the statement of those who dwell there, in June.

Let us now turn our attention to another series of phenomena, which are the more interesting because they exhibit facts which seem to be opposed to the universal rules of the distribution of animals; I mean the appearance of certain species in localities where they are separated from their nearest relations by very long tracts, sometimes by whole continents. Such cases are to be found in Europe in the presence of *Cyanopica cyanea*, Pall., in Siberia, whilst their nearest relations (*Cyanopica Cooki*) reside in Spain, of *Myogale moschata* in Russia, and of *M. pyrenaica* in the Pyrenees, while no species even allied to them exists in the intervening countries. An entirely similar instance is afforded by the appearance of the Angola magpie (*Pitta angolensis*) in a limited district of West Africa, while the genus *Pitta* most essentially belongs to Wallace's oriental region, between which two haunts beside the ocean, lies the whole breadth of the African continent. The same holds good of *Atherura* (tufted-tailed porcupine) and the West African representatives of the Tragulidæ; both genera are properly oriental.

Now, as it is so difficult to account for such very exceptional cases, they must challenge us to an exact study of the intervening regions; and that surprising disclosures may often be found there is shown by the following facts:—According to my experience, *Atherura* is by no means rare in Central Africa, and is fairly equally distributed; in Monbuttu I succeeded in collecting within a short time a number of living specimens. In contradistinction to *nondā*, the common variety of porcupine (*Hystrix*) which is found beside it, it is called *koliā*, and its region may at present, as far as my experience goes, be defined as extending northwards to about 3° 40′ N. lat., and

eastwards to 28° 50′ E. long. But I do not doubt that, as regards its eastern limit, a much greater extension may be revealed by further investigations, for in former journeys I have found even at 31° E. long. forms of vegetation which decidedly belonged to the western tropics. If, then, such an advance towards the east should be confirmed, of which I have no doubt, a connexion will thus be formed with hitherto apparently isolated representatives of the same species in the west. It seems to me more than probable, from instances I have seen, that a representative of the Tragulidæ exists in Monbuttu; and I have also been told of a variety of Lemuridæ. The fauna of Central Africa is yet too little known to be applied to the elucidation of disputed points, but it seems as if the soil of the Black Continent is able to furnish reasons for all apparent exceptions, and connecting-links for all broken chains. Not long ago Anomalurus, the West African representative of the flying squirrel, was a completely isolated phenomenon, until Peters described the *Anomalurus orientalis* of Zanzibar from Hildebrand's specimens. Now, I have found a new species of the same kind in Monbuttu, whereby the chain is completed from one side of the continent to the other. The northern limit of this interesting variety may extend in the western division of our territory to about 4° N. lat., but then it turns in a long curve to the south-south-east, following the boundaries of the true forest region.

What has been affirmed with regard to certain Mammalia is of course true of other classes of animals, and especially of birds. Whenever the same species has appeared isolated in the west and east, the north and south, we are quite justified in searching for their connecting links in our territory. *Melocichla mentalis*, Fras., was till now known only in diametrically opposite places, namely, the Gold and Loango coasts on the one side, and Ukamba in East Africa on the other; yet it belongs to a family spread over the whole of Central Africa. *Macronyx croceus*, Vieill., is cited by Heuglin and Antinori as a case of complete isolation in the Bahr-el-Ghazal region, though the bird is commonly seen southwards from 6° N. lat. It would therefore be by no means strange if continued collecting rendered the isolation of *Pitta angolensis* doubtful by the discovery of

allied varieties, and to this end the regions of moist, warm, dense forests should chiefly be searched. Heuglin, though furnished with comparatively insufficient material, has already pointed out that, as we advance from the north in the direction of the equator, the affinities of the north-eastern fauna with that of the west, and even of the south, grow more numerous, that is, a number of varieties formerly believed to belong exclusively to the west spread themselves much farther to the east than has generally been supposed. My own collections confirm this opinion most thoroughly, and I will attempt to show that the reason of it is to be found in the physical formation of the country and the vegetation which clothes it.

Soon after the Bahr-el-Jebel has passed the rocky defile of Jinja, after leaving the Victoria Lake, and has spread itself out in the wide alluvial plains of eastern Unyóro into a series of shallow, lake-like basins, it is again confined by mountain ranges, and flows between high rocky banks over a succession of steps, which form rapids, to the Mwután Nzige or Albert Lake. Except the extensive swampy flats to the east of Mrūli, which are exposed to the inundations of the river, and the equally flat tracts of the southern Langó district, which in some places extend to the river, and are covered with a vegetation of grass and papyrus peculiar to such boggy districts, both banks of the river are overgown with thick forest. On the northern bank, in consequence of less abundant irrigation, greater declivity, and a very insignificant thickness of surface soil, the leathery-leaved and stiff forms of northern vegetation prevail, which are not affected by temporary droughts. The southern bank, on the contrary, presents a succulent verdure, and a rich display of foliage belonging to tropical species and dependent on constant moisture. Though the region between the lakes, a decidedly mountainous country, cannot produce the exuberant vegetation of the western tropics, owing to its elevation, yet the dews, continuing all through the year without intermission, and the exceedingly rich and well-watered soil, supply a basis for a considerable development of vegetable growth. Besides the imposing representatives of northern latitudes, the Ficus, Bal-

samodendron, Cratæva, and Combretum, the following genera are found here:—The Protea of Abyssinia, Anona, Hexalobus, Coffea, Dracæna, and, above all, miles of banana plantations. As the Victoria Nile forms a boundary between the languages of the northern Negro races and those of the Bantu tribes, so also it marks the line where the cultivation of corn in the north ceases, and sweet potatoes become the foundation of human sustenance. Generally speaking, the flora of the region under consideration forms an integral part (as Grant's collections in particular show) of the large and yet so uniform vegetation of the North African region, which fact explains, for instance, the remarkable scarcity of palms in this country, the common Phœnix, Borassus (rarer in general towards the equator), and Calamus being the only palms known at present. But a number of West African varieties also occur, probably attaining here their eastern limit, and marking out this country as a region of transition.

This position, however, is more unmistakable as regards the fauna. Unfortunately, little is known of Mammalia; it may therefore be sufficient to allude to the frequent occurrence of Aonyx, and to mention that during my sojourn in Ugánda and Unyóro I was repeatedly told of a large anthropoid ape, which the Wagánda called *masíki*, and the Wanyóro *kinyabantu*. But as, in spite of all my efforts, I did not succeed in obtaining a specimen, its existence in the Nile basin proper remains unverified. The case is different with birds. Besides the species and forms distributed generally over the East African sub-region, a large number of distinctly western kinds are found, of which I will mention *Campephaga phœnicea*, Sw.; *Tricholais canicaps*, Cass.; *Telephonus minutus*, Hartl.; *Trichophorus flavigula*, Cab.; *Spermestes cucullatus*, Sw.; *Agapornis pullaria*, L.; and in particular the very common *Psittacus erythacus*, L. While it is thus sufficiently proved that the West African fauna extends to this country, we find, on the other hand, a number of true East African types which seem not to appear again farther westwards. I will only mention *Coracias caudata*, L.; *Phyllostrephus Sharpei*, Sh.; *Buceros cristatus*, Rüpp.; *Pionias rufiventris*, Rüpp.; *Schizorhis leucogastra*, Rüpp.; and *Francolinus Grantii*, Hartl. The district between the lakes must,

therefore, be considered neutral ground, as it were, on which representatives of different zoological regions meet: if we go westwards, the West African type of fauna and flora becomes continually more prominent; if we go eastwards, we meet the well-defined forms of the southern Somal district, and more isolated instances of the forms of the southern half of tropical East Africa. It is not necessary for me to point out how exceptionally profitable a thorough exploration of this region would be.

Let us now follow the Bahr-el-Jebel in its farther northern reaches. It flows out of the Albert Lake as a majestic stream, accompanied on either side by mountain ranges running at a greater or less distance from its margin, and at length approaching close to it in the Mádi district, where they confine its bed and give rise to a series of falls and rapids between 3° 40′ and 4° 40′ N. Farther to the north, these mountain-chains trend to the west and east, leaving the valley of the river considerably broader and larger. Only solitary mountain groups rise here and there almost abruptly from the level country, until at last, still farther northwards, the endless swamps commence, in which the river, now without banks, is involved up to its confluence with the Bahr-el-Ghazal. In accordance with the character of the mountains, the detritus of which constitutes for the most part the plains beside the river, the soil of the valley is not rich. Sand, often mixed with loam, and red clay impregnated with iron, which covers more elevated parts, are not adapted to develop a particularly luxuriant vegetation. Hence it will be seen that the whole river-valley of the Bahr-el-Jebel, up to the Albert Lake, must be included in the domain of the steppes,—not the sandy steppes of southern Kordofan, nor the extensive savannahs of the eastern Sudān, but wooded steppes, where beautiful forms, such as Tamarindus, Khaya, Odina, Anogeissus, Bassia, and Stereospermum attain to full perfection, and Acacia, Zizyphus, Balanites, Sarcocephalus, Gardenia, &c., are most prominent. The farther we go from the river westwards, the more perceptible does the transformation become, the more striking the resemblance with the sandy plateaux and steppes of the Somal country. The whole Langó district, starting from the eastern frontier of

Latúka, and extending as far south as Usóga, may be compared to certain tracts of Kordofan which contain scattered, bare mountain groups, sandy steppes, reservoirs of water, and a nomadic population.

Following the configuration of the country, the limits of certain forms of vegetation run here much farther to the south than they do to the west of the river or in the river-valley itself. In the latter, for instance, the dum palm (*Hyphæne thebaica*) reaches its southern limit at 5° 20′ N. lat., while in Latúka I have seen woods of it, and then it has been found following a large curve to the south-east. In the east, also, a Lawsonia is common, which I could not distinguish from *Lawsonia inermis*,* also *Calotropis procera*, *Leptadenia pyrotechnica*, and on the margins of rain-torrents a tamarisk—all of them trees which do not appear at all in our country proper, or, like Calotropis, but seldom.

While the plants just mentioned suffice to determine the botanical status of the country, its fauna also is peculiar to itself. Besides *Equus zebra* and *E. Burchellii*, there are antelopes, giraffes, various kinds of hares, *Lycaon pictus*, of Edentata, Orycteropus, and Manis, of monkeys, Theropithecus, and a species, perhaps new, of Cercopithecus, which give the country a character of its own. With the exception of the monkeys, which are, of course, restricted to the forest, whether open steppe forest or connected woodlands, they are all true inhabitants of the steppe, and therefore on the western bank of the Bahr-el-Jebel they appear only in the flat country as far as the skirts of the mountains, but entirely avoid their slopes. The extraordinary abundance of elephants in the east may be connected partly with the occurrence of forests of Balanites, but, on the other hand, considering the scanty supplies of water towards the east, may be due to the fact that the animal is capable of long marches, and in the dry season retires to the broad swamps of the Bēr country, which never dry up, and to the swamps on the northern frontier of Usóga, where he defies all pursuit. What is true of the Mammalia must, of course, also hold good of the birds, and we must next

* A fact of great importance as regards the origin of this widespread object of cultivation.—G. S.

look for true steppe birds in the eastern division of our country, although we shall also meet with forms which have hitherto been known as belonging exclusively to the east. Among the former, the ostrich ought to rank first; it is always found wandering about in flocks, of often thirty birds; it keeps strictly to the steppe, especially where covered with brushwood, and avoids altogether forest, mountain lands, and damp tracts. From the class of birds of prey it may suffice to select *Melierax polyzonus*, Rüpp.; *Helotarsus ecaudatus*, Daud.; and *Poliornis rufipennis*, Strickl., the last of which has its proper home here. I am astonished at never having yet met with the bird of the steppe *par excellence*, *Gypogeranus serpentarius*, L., though I have no doubt of its existence here. As a matter of course, all the birds dwelling in the steppe region farther to the north frequent also our southern steppes, and therefore no special enumeration of them is necessary, for they consist for the most part of forms widely distributed over Africa. Turning to the purely eastern varieties, we first of all come across *Schizorhis leucogastra*, Rüpp., which even in Latúka replaces *Schizorhis zonura*, Rüpp. (a native of all other parts), and is the prevailing form far down to the south (Ugánda). Its western limit may be laid down at 32° 30′ E. long. The following are also purely eastern birds:—*Dryoscopus nigerrimus*, Reich.; *Spermestes caniceps*, Reich.; *Crithagra chloropsis*, Cab.; *Caprimulgus inornatus*, Heugl., all of which are caught in Latúka. It must further be remarked that none of these eastern species cross to the western side of the Bahr-el-Jebel valley; on the contrary, several do not even reach it, but confine themselves to the eastern slope of the mountains of Obbo.

The circumstances connected with the flora and fauna of the western side of the river do not assume such a simple form. As already stated, there is here also a chain of mountains running from the lake towards the north, at a greater or less distance from the river. At about 4° 8′ N. lat. this range leaves the river, and, gradually decreasing in height, runs in a north-westerly direction to the Bahr-el-Ghazal; all the country lying to the north and east of this chain, consequently the whole triangle formed by it, the Bahr-el-Ghazal, and the Bahr-el-Jebel, belongs to the steppe domain, and the fauna assumes a corre-

sponding character. But all the Mammalia we have mentioned are found again here except zebras, which appear to be totally absent; ostriches also are frequent, at any rate to the west in the Jangē (Dinka) country, while in the eastern division of the region in question they are rarities, no doubt because the country is swampy and densely populated in its dry parts. The distribution of the ostrich, therefore, is regulated by the line of demarcation between steppe and forest, and this applies also to the *Manis Temminckii*. Both are absent in Ugánda, Unyóro, Kaliká, Monbuttu, Makraká, and the countries of the Jur and Bongo, as well as in Dar-Fertit, while they are common in the adjacent Dinka countries, in Latúka, and in the whole of the Shūli and Langó districts. The same is true of the giraffe.

Ascending from the plain, we leave the steppe and come next to the real forest region, into which, however, the steppe often intrudes, generally in long ribbon or wedge shaped strips. Probably the largest part of our territory is covered with brushwood (open and generally low woods), where, however, tall trees are not altogether wanting. But it is seldom that dense woods of one kind of tree are seen, and it is the absence of these which makes our woods seem open and straggling, at any rate in the eyes of a northerner. Real forest, closely packed woodlands, where a man may roam for hours and days together without being reached by a ray of sunlight or feeling a single drop of rain, extend into our territory only on the south and west, and correspond completely with the reports of Livingstone and Stanley concerning the south and its impenetrable forests. A connecting-link, as it were, between these two kinds of forest is formed by the belts of wood along the margins of watercourses, in which all the vigour and splendour of tropical vegetation are displayed.

It is apparently strange that, the farther we advance westwards the farther do these belts extend northwards, so that, for instance, while in the east the Victoria Nile seems to be their northern limit, and they are consequently restricted to Ugánda and Unyóro, they are found again in the west of Makraká, that is, more than two degrees farther to the north. This apparent anomaly may be explained by the fact that the main lines of de-

marcation in the whole of our territory, both for the vegetation and the fauna, run nearly from south-east to north-west, and the purely southern forms extend farther northwards in the west than in the east. I learn from Lupton Bey that he has found numbers of Elaïs (oil) palms in the west of the Bahr-el-Ghazal basin, even in 6° N. lat., which first appear in our territory at 3° 40′ N. lat. I have myself found in the Makraká territory, in 4° 45′ N. lat., *Calamus secundiflorus* and Pandanus, the former of which does not cross 2° 20′ N. lat. farther to the east, whilst the latter is wanting altogether. It is clear that this striking variation of limits along the parallels of latitude is determined by the differences of altitude and climate in the region under consideration. As the boundary-line follows very nearly the western slope of the ranges before mentioned, the richer vegetation must be ascribed simply to more abundant dews, inundation, and saturation of the soil, the existence of such motive forces being proved by Casati's meteorological records from Monbuttu, and more especially by Junker's cartographical labours.

The flora naturally harmonises with the fauna, and as the western and southern varieties of plants penetrate much farther northwards than has been supposed, corresponding animal species will go hand in hand with them. Omitting altogether older varieties, already cited by Heuglin, such as *Agapornis*, which is not rare, but, on the contrary, very common, I will only refer to some forms in my last collections from Monbuttu,—*Turacus giganteus*, Vieill.; *Musophaga*, sp. n.; *Corythaix persa*, L.; *Spermospiza hæmatina*, Vieill.; *Pyrenestes ostrinus*, L.; and from Makraká, still farther north, *Nectarinia cyanocephala*, Sh.; *Pytelia Monteirii*, Hartl.; *Hyphantornis ocularis*, Sm.; *Megalæma bilineata*, Sund., and several kinds of Trichophorus.

As a result of all the facts now collected, the limit of Wallace's "West African sub-region" must be pushed very considerably to the east, and finds its natural boundary in the mountains, which, starting from the Albert Lake, form on the one hand the highlands of Amadi and Lógo on the west and north, and on the other send out spurs towards the north-north-west, and subsequently to the north-west, which have already been alluded to several times as the boundaries of the

steppe and forest region. Joining this region, which harbours purely western and partly also southern species of plants and animals, is the district between the lakes, to a certain extent a neutral transition ground, where eastern and western varieties meet. The close affinity between the two regions will be best demonstrated by a short review of the most prominent animals peculiar to them.

Let us take first the grey parrot, *Psittacus erythacus*, L., the northern limit of which passes right through our territory. From Usóga, where the bird is common, according to the assertions of the natives, it passes in a deep south-westerly curve round the large swamps in the north-eastern part of Unyóro, then bends farther northwards, and for the rest of Unyóro remains at 2° N. lat., along which parallel it crosses the Albert Lake. After this, its northern limit is uncertain—we have here to deal with regions entirely unexplored—until it reappears in Monbuttu, and follows very nearly the course of the Bomokandi or Mayo, reaching the Welle-Makua at one point only, and crossing it where the large banana and oil-palm forests at the great bend of the river in the A-Mádi district furnish a suitable abode. Beyond the mouth of the Bomokandi, it appears to advance much farther to the north, for Lupton Bey writes me that it is not uncommon in Dar-Abu-Dinga, and to the west of that place, that is, somewhere between 5°–6° N. lat. This accords with its appearance so far north as Lake Chad, where it has been caught by Denham. In this case also the line running from south-east to north-west is followed.

While it is definitely proved that the grey parrot reaches the Nile basin, as I have seen it frequently in Ugánda and the adjacent countries, this is still an open question as regards the chimpanzee. Its existence in the country proper of the sources of the Nile is still problematical. All the more frequent is it in the basin of the Welle-Makua. Throughout Monbuttu and the wide A-Zandē district, wherever large stretches of forest or belts of wood afford sufficient space and suitable trees, the chimpanzee will not be sought in vain. It passes then far up northwards with the forests, and Dr. Junker reports that it is also common in the west, in the region of the A-Babúa, for

instance. It builds its sleeping nests of branches and leaves in the highest and strongest trees, and stays in them till late in the morning.

While it has been thus demonstrated that the boundary-lines of the vegetation coincide for the most part with those of the fauna, it is natural to expect that other facts relating to this subject will be found in our territory. It is known that birds of prey are rare in the proper forest region, and this has been proved to correspond with their distribution towards the south. Except in Ugánda, where daily executions supply the necessaries of life to a considerable number of vultures, the regions to the south of 4° N. lat. are poor in birds of prey, unless they are steppe regions. In Monbuttu, where no cattle are kept, I only saw a single vulture, which, on the bank of the Kibali, was probably pondering over the competition of the population. The commonest bird of prey there is *Asturinula monogrammica*, Temm., which lives on Fringillidæ. Already in Makraká *Milvus parasiticus*, Forsk., is rare, though elsewhere it is one of the plagues of our country. Where the forest region begins, the carrion vultures, the eagles, Melierax, Poliornis, and others, almost entirely disappear, because their food is only found in open country.

Were the boundaries between steppe and forest, as well as between their connecting-links, everywhere sharply defined, we should be able to draw direct inferences from the vegetation of a country as to the nature of its fauna. But this is not the case; on the contrary, the various regions run so much into one another that a real separation is impossible, and hence it happens that in every locality which admits of it we find the inhabitants of two different regions intermingled. Thus Monbuttu, belonging to the western region, besides harbouring the purely western animals, supplies us with a number of animals that have long been known to us in the East African region. Thus, too, the inhabitants of the south and west push as far north and east as the conditions of climate and sustenance allow them, and the occurrence of such species comparatively far to the north seems to depend only on the possibility of their procuring suitable food, viz., on vegetation, climate, and elevation. But why certain species of animals inhabit a well-

defined and very restricted country, never crossing its limits, consequently occupying a position of isolation with regard to their kindred, cannot be explained without special investigations, which do not lie within the range of these general observations, and which will be better worked out in the light of later notes concerning the distribution of individual genera.

VII.

ON THE STATE OF CIVILISATION AND ON POLITICS.

I.—THE ZERÍBAS IN THE PROVINCE OF RŌL IN 1881.

(*From a Letter to Professor G. Schweinfurth.*)

DANAGLA MISRULE—STATISTICS—PARASITICAL STRANGERS—SLAVE MURDER BY THE DANAGLA—ROBBERY, PLUNDERING, AND THE SLAVE-TRADE—STATISTICS OF THE SLAVES IN AYAK—THE SHAMEFUL CONDITION OF RUMBĒK—ISLAM MAKES NO PROSELYTES.

TRAVELLING straight across the northerly part of the Nyambara country, we arrived at Biti, which is situated some two hours' march from Amadi, and here we shall have to remain for a few days. Since this part of the country was taken out of the hands of the Khartúm trading companies, it has yielded absolutely nothing to the Government, except the ivory obtained from Monbuttu. The abundant imports of corn of various kinds, honey, wax, sesame oil, and fat of the Butyrospermum, have been shamefully squandered and wasted, the rearing of cattle has been put an end to, and the people have been first plundered and then sold in troops as slaves. They have been driven from Monbuttu to this place like beasts for slaughter. What I used to see in Bōr and Ladó when I was a novice in the service, and when there were no restrictions on the slave-trade, was mere child's-play compared with what goes on at these *zeríbas*, inhabited and controlled exclusively by Danagla; for here slave-raiding is quite openly and systematically carried on.

The various factors which are at work here may be seen from the following statistical abstract:—

I. Danagla* (*hutterïe*), or irregular soldiers in Government employ	40
II. Danagla in or near Amadi, who are not employed by Government†	96
III. So-called Dragomans, *farukh*, *basinger*, &c.‡ . .	319
	455

According to these statistics, the unproductive population in and around Amadi numbers, say, 455 men, and if we add to these their concubines, lawful wives, and wives of the second rank, and the female slaves, boys for carrying guns and water-bottles (*rekwa*), children, &c., a total of about four on an average to each man, these "lilies of the field" must amount, at the lowest estimate, to 2200. When I use the expression *ushurïe, i.e.*, tithe-payers, it must not be thought that these people pay taxes of a tenth or even of a thousandth part to the Government—I at least know nothing of such payments. They pay nothing; they only take whatever they can lay hands on; and the euphemistic name has been given to them by the person who drew up the report which I copy, not by me. That this man knows how to round off a neat sentence well is proved by a note which he adds after the names of the *fakïs*:—"*Hali an es sánaë munkáta'a lillah te'ala*," *i.e.*, "Without any occupation, depending upon God the Almighty for support." Now, as the population of the Amadi district is, at the most, from eight to ten thousand, the crying evil of this state of affairs is obvious. No cattle are kept—that was prevented long ago; there is scarcely any hunting; so that

* Danagla is the plural of Dongolaui = Nubians from Dongola. They were once the armed employés of the Khartúm merchants, and when the trade in ivory was taken over by the Egyptian Government they were enlisted as irregular soldiers. A company of them is called a *hutterïe*. "Dragomans" are freed slaves, who are employed as police-soldiers, and negotiate with the natives. The *basingers* are armed slaves who accompany the traders as an escort; their gun-boys are called *farukh*, which name is also given to mercenaries hired as irregular troops at Khartúm.—R. W. F.

† They included 27 Danagla without any occupation, 46 *ushurïe* (tithe-payers), 13 pedlars or traders, 1 tailor, 1 boatman, and 8 *fakïs*.

‡ Namely, 145 Monbuttu, 76 Morú, 51 Nyam-Nyam, 38 Mittu, 6 Bongo, and 5 Agār.

nothing is left but the cultivation of corn, which, besides serving as food, has to furnish the material from which to distil brandy, which practice has unfortunately taken root and is in full swing among the natives.

It might have been supposed that, in order to secure for the Danagla a comfortable existence, at the expense of the inhabitants, the latter (the producers) would at least have been left in peace. Far from it. During the first two days of my stay here, the Negro chiefs, living in the immediate neighbourhood, complained to me that some of their people—mostly women and girls—had been stolen to the number of two hundred and forty. These figures do not include the numerous Monbuttu, eighty-five of whom (mostly girls) claimed and received their freedom on the day of my arrival; and about two hundred slaves belonging to other tribes, who at once returned to their relatives. In the course of a few days the number of Monbuttu who were set at liberty, and at once sent home to Makraká, amounted to two hundred and one. Notwithstanding all this, greater surprises awaited me. I received a report from the Monbuttu people in Makraká, that a *fakī*, residing there, Mohammed Salih of Bornu, who had been imprisoned for slave-dealing in Gordon's time, but soon set at liberty, had gone to Monbuttu, and with the help of an escort of six armed slaves, had taken away twenty-six persons, and brought them to Makraká. The *fakī* and his prey were very soon brought before me; there were nineteen young boys, five girls, and two children of four to six years of age. My examination proved that the *fakī* had gone by unfrequented paths from village to village, and had obtained these twenty-six individuals, partly by false representations, partly by open violence. Of course it did not occur to the governor of the district, Rakhit Bey, who happened to be at the time at Kabayéndi, to imprison this man-hunter, although he had him brought before him, and reprimanded him for coming into the station by night!! And I am expected to perform wonders with such officials! Naturally, I at once took precautions to render the recurrence of such an affair impossible.

The station of Bufi being very remote, my visit was wholly unexpected, and therefore occasioned quite a panic. Nobody

seemed to have any idea of getting a living except by plunder and the slave-trade. On the very first day of my visit two hundred slaves were reclaimed by their relations. More than five hundred carrier-loads of corn have been sent here by the natives during the last few weeks, and squandered. The magazine is now quite empty; the people complain of hunger, and at the same time wander about the station drunk. A certain Abd-el-Kher, an official here, has himself collected not less than eighty-four slaves, while the number of those reclaimed in two days from the immediate neighbourhood is about four hundred, besides the Monbuttu who have been restored to their chief, Gambari. Of course I have made a great stir among this rabble, and think now that the Negroes will have a little peace, and will entertain more respect for the Government than they have done hitherto.

Ayak, one of the oldest settlements of the Danagla, and one of the strongest bulwarks of the slave-market, was governed by a certain Defa'allah, who, in spite of his most glaring and cruelly bad treatment of the Agār-Negroes, and in spite of having connived at robbery and murder, has contrived to maintain himself here for years—how I do not care to discuss. He was hated and feared by all the Negroes. Shortly before my arrival, this exemplary governor had hunted up over four hundred slaves of both sexes and all ages, belonging to the neighbouring Agār, Kīch, Atwót, and Mandari. About two hundred of the choicest boys and girls had been concealed by trusted chiefs in the small *zeríbas* of the so-called Dragomans, and about fifty Monbuttu who presented themselves to me were said to have been voluntarily set free. If we reckon to these, at a low estimate, from seven to eight hundred slaves present in the station, it gives in round numbers 1500 persons, a number certainly about one-third under the mark.

If we summarise the inhabitants of Ayak, we find them to be as follows:—

Pedlars (one of them a Greek) . . .	7
Persons without any employment . .	57
Ushurïe	57
Irregular soldiers	30
	151

This gives 151 masters to 1500 slaves; and this does *not* include seventy-three *basingers* (armed Negro slaves), with their slaves, and a large number of Nyam-Nyam, Monbuttu, Bongo, Mittu, &c., of whom nobody was able to tell where they came from, nor what they were; but, at any rate, they all have slaves.

That my estimate of the number of slaves here is a very moderate one is proved by the fact that, in reply to my reprimand, the officials said there were formerly three to four thousand slaves in the district, and no one had ever troubled about it. Why, then, should I? The dismissal of the governor of the station and his immediate banishment, as well as the arrival of fifty-four regular soldiers from Shambe to garrison the station, soon taught the people that at last even here the rights of the Negroes will have to be respected.

In addition to the six or seven hundred *ardebs* of corn which had been taken from the natives each year "for the Government," a very large quantity had also been obtained by the officials for their own private uses, and for the distillation of brandy; and no one took the trouble to deny that large quantities of sesame, sesame-oil, Butyrospermum fat, honey, wax, and ground-nuts had been requisitioned from the people under the name of taxes. Plunder has indeed been carried on to such an extent that it is a wonder that anything at all remains for the people; and that so many natives still exist in the neighbourhood must certainly not be attributed to the care of the Government, but to the fact that these Dinka tribes, with their long lances, have been able to protect themselves.

Murder appears to be so very common here that scarcely any inquiry is made about it—they were only *abīd*, that is, slaves!

A certain Abd-es-Sadik (*i.e.*, a servant of the Just!—what irony!), himself a slave of the Defa'allah mentioned above, lately put four persons to death, and when his master was questioned about it, he replied that he had long ago given the fellow his liberty (to murder, presumably!) and assigned a village to him. I ascertained, however, that on the day of my arrival he was still living in Defa'allah's house. When

Defa'allah's slaves were subsequently confiscated, twenty-seven were found to belong to Abd-es-Sadik.

In explanation of the phrase that "he had assigned a village to him," it may be as well to remark that all the officials here had a number of male slaves, whom they armed—of course with arms and ammunition belonging to the Government. These fellows then settled down in the native villages, and compelled the inhabitants by force of arms to contribute all sorts of produce, which they partly used for their own support, but sent most of it to their masters' houses. Yusuff Pasha Hassan, Hassan Bey Ibrahim, Mula Effendi, and the rest of these petty Satraps have thus kept up dozens of these robbers' nests here, concealed by the prestige of their names. Other armed slaves went about the country, hunting up slaves for their masters. That all these slaves carried on slave-hunting on their own account need scarcely be mentioned.

My stay at Ayak lasted a long time, since Mula Effendi, the chief of the whole district of Rōl, naturally showed no inclination to proceed against his accomplices. He had, indeed, himself at Ayak a branch establishment of his chief house at Rumbēk, with fifty to sixty inmates.

Rumbēk is not far from Ayak, so that the people there had had time to send away any slaves from whom gossip or complaints were apprehended, and even in some cases to send them free to their homes. If the number of such was four hundred in Ayak, it was here from six hundred to seven hundred, while the total number of slaves in Rumbēk before my arrival was reckoned by the people themselves at over three thousand. The station was a fearful place, as bad as brandy, syphilis, the slave-trade, and debauchery of every sort could make it. Happily, my order that every man should now pay regular taxes and officially announce the number of his slaves had done away with the desire to stay among the scum of Khartúm which had collected here, and I was glad enough to dismiss all this rabble to Khartúm, and to permit them to retreat to the Bahr-el-Ghazal, where the Danagla *régime* flourishes as it did before Gessi's time. The morning after my arrival one hundred and sixty-five Monbuttu slaves of both sexes (among them a number of children of five to six), who

did not understand Arabic, and had only lately been brought here, came to ask me to restore them to their own homes; forty-five of them (twenty-five males and twenty females) belonged to Mula Effendi, the governor of the district! The question of their support presents no difficulty; the Negroes grow corn in abundance, and if meat runs short, the Agār or Atwot would be said to be in revolt, a raid would be undertaken, and cows stolen. Then a report would be made to the Government—there are some very curious ones of the kind in existence—and the whole affair would be a thing of the past.

Since 1877 no accounts have been sent in from or kept by this administration. Though the governors received money for the payment of wages, no one has been paid a piastre for years; probably, however, the governors have bought goods with the funds belonging to the Government, and sold them at three times the amount. Slaves figure in these accounts as oxen, asses, &c. The making of false seals and fabricating receipts by their use complete the picture of what has been going on here. And with it all the place is full of prayer-places and *fakīs*.

In the divan at Rumbēk I sat upon Zibēr Pasha's carpets and cushions, and coffee was handed to us by Darfur slave-girls captured by his son.

It is a curious fact that during more than twenty years' rule, Islam has scarcely made ten proselytes in the whole of our provinces—a greater proof of administrative failure could hardly be furnished.

On my return journey I succeeded in freeing about fifty more slaves, who had been concealed in the small *zeríbas* of the Bēli district, and I sent the owners to Ladó.

Meanwhile soldiers from Ladó had arrived in Amadi, and had commenced to turn out the Danagla. Although my soldiers are not exactly angels, and now and then make the people work for them—they are but Negroes after all—still they are used to discipline, and as far as their treatment of the people is concerned, and the good terms they are on with them, they deserve nothing but praise. But it may be asked, Will my efforts produce any lasting effect?

2.—On Exploration, the Labour Question, and Civilisation.

(*Letter to Dr. G. Schweinfurth, dated Bedén, May,* 1881.)

LATÚKA—A FIELD FOR EUROPEAN SCIENCE—CHINESE LABOUR—THE LAKERDA-TREE—MORINGA FROM UGÁNDA—CULTIVATION OF RICE AND MAIZE—EUCALYPTUS—EUROPEAN FRUITS IN LADÓ.

A JOURNEY to Latúka, to inspect the stations there, took me *viâ* Agarú to Fadibék, and, after visiting Fajulli from there, I returned *viâ* Obbo to Laboré. It would be impossible for me to give you a thorough description of this country without writing at greater length than you would perhaps care for, but in order to accomplish the purpose I have in view, it will be necessary to take up a few minutes of your time.

As soon as we had passed through the narrow defile which runs to the south-east from Tárangole to Jebel Sereten, a view was obtained of a perfectly new mountainous district. Many solitary masses, often of considerable size, were seen, as well as long ranges and chains crowned by jagged peaks and domes. The serrate mountains of Irenga and the mountains of Musingok, which form a connecting-link with Kaffa, were visible to the north and north-east, in which direction were also the rivers Tu and Ogeloquer, both flowing to the north. In the east the extended range of Kuron stood forth, which stretches like a broken wall towards the south, joins the ranges of Latúka and the Obbo plateau, with its formidable mountain pyramids, in the west, and descends in terraces into the Somal and Galla countries to the east.

Whilst our station at Agaru has an altitude of more than four thousand feet, according to hypsometrical observations, Fajulli, which lies farther to the south, is much lower, notwithstanding the general rise in the altitude of the country.

The station in the Lirēm country, which is inhabited by the Ajé division of the Lángo tribe, keeps up our communications with the districts of Umiró, Lobbōr, Termayok, Koliang, Bognia, and also with Turkan, from where we obtained

some splendid camels last year, which still do good work at Rejaf.

The number of new names I have just mentioned, and which are not yet to be found upon any map, will show you what a large tract of new country we have now to deal with, especially when I add that the places are not situated at five to six hours' march from one another, but often at a distance of from six to eight days' good march, and even more.

Is it not about time for me to remind you of your friendly promise to assist me whenever you could? Our stations now form as good a basis for the exploration of the country as you could possibly wish, and I need not add that I would do all in my power to aid explorers.

A great deal of money is given now-a-days—unfortunately in Germany as elsewhere—for the exploration of the worn-out routes which lead from Zanzibar into the interior; men and money, too, are sacrificed on the west coast, while there lie here scientific treasures within reach, and no one heeds them! I apply to you, then—the approved master of African exploration, a disinterested promoter of scientific research—with the earnest and sincere request to use the proffered opportunity, either yourself or for others, who, if sent by you, will always be welcome. Will you not let German explorers have the honour of opening up this new, rich field? No delay, however—you know well enough how precarious official positions are in the East—and it is a question whether my successor will take an interest in science. Do not think me arrogant for using this last expression; on the contrary, I am perfectly well aware that I am one of those "of whom you do not know the stamp," as Professor Hartmann was fond of saying. You, however, who have known the East for a long time, will probably say that I am right.

And now I will touch upon another point which appears to me to be a vital one, and upon which I would ask your advice and help in the name of those ties which bind you to our country. You were, I think, the first to propose the immigration of Chinese to open up Central Africa. Since the government of this province was entrusted to me three years ago, I have certainly studied the people and the country

with great care, and I have come to the conclusion that under the present conditions no real progress can be made, or at least it must be so slow that decades will hardly suffice to set upon a solid basis the work which has hitherto been done with so much trouble. Let us set aside all discussion as to the cause of the anomalies which exist—regrets are no cure. I cannot get over the conviction that if it is possible for Central Africa to be opened up, it can only be accomplished by means of the Chinese, and that our beautiful country, with all its rich resources, and with the possibility which is afforded of establishing good communications between each settlement by means of such workmen, would repay a thousandfold such an undertaking. This idea has been one of my dearest projects for four years, but I kept silence, because I hardly expected to obtain a single response to such wishes. Now, however, that you have given me permission to come to you for advice, it is different, for your influence in Government circles in Egypt will attain much that "*un certain Emin Bey*" would strive for in vain.

Will you support me in this matter if I apply officially to the Government? Will you convince the Belgians that a few hundred Chinese established in any suitable place—under the direction of *practical* Europeans—would form a better nucleus for the civilisation of Africa than any number of Indian elephants and ironclad steamers? Lastly, will you be so good as to give me your opinion on this subject?

Do not be annoyed at my freedom. If I had not the welfare of these lands really at heart, if I did not fear that some day or other I must leave them, and that my work, the result of many a weary day, may fall to pieces, I would keep my own counsel, as I have done till now. Fortune has long permitted me to withstand the tropical climate. My days, however, may be numbered, so is it not better for me to speak out freely?

When climbing a high hill in the Shúli district last year, I noticed a species of dwarf tree with reed-like leaves; its roots penetrated to a depth of about twenty or thirty inches in the moss-covered humus which lined the crevasses existing in the bare granite. The little tree was so remarkable that I then intended to ask its name.

I have again met with quantities of this tree on the mountains

in the east and south-east of the Latúka country (Jebel Ghattal, Jebel Sereten, Jebel Kuron), and I take the opportunity which Consul Hansal's courtesy affords me of sending you a specimen in spirit, with the request that you will kindly determine its species. The Shúli call it *lakerda.** The raw shoots are used for cleaning and polishing shields. Its vertical distribution is from 2500 to 3000 feet. Together with this plant you will receive the leaves and blossoms of a tree which I have introduced here from Ugánda, and which thrives well; its seeds (also sent you) produce a considerable amount of fine yellow oil, and when we ran out of soap, we made a good substitute by mixing the crushed seeds with potash. The tree shoots up like a bamboo to a height of some twenty-five to thirty feet; its stalk, however, is too weak to be of any use. It grows singly in the banana groves in Ugánda. Is it the Moringa?

The rice† which you were good enough to send me grows splendidly, and I shall take the liberty of forwarding you a sample of it. The "horse-tooth" maize which His Excellency Stone Pasha sent me also thrives well; each crop, however, requires to be sown on new ground, for if two crops are sown on the same field, the plants of the second crop are small, and the grain is small and round, like that of the usual sorts. It is curious to notice the tendency which every variety of maize sown here has to produce dark, often almost black, grain. The grass‡ for pasture which has been sent me has not grown as well as I had hoped; perhaps the soil was too moist. I have just sown a fresh crop. After considerable trouble I have managed to rear some ten to fifteen Eucalyptus trees from two and a half to three feet in height; the seeds which Gordon Pasha obtained from the English Consulate in Algiers sprouted well, but withered immediately.

The fruits which flourish best are figs, lemons, citrons, Anonas, and the *Carica papaya*. Pomegranates bear little fruit. I have no pineapples. Three species of banana bear well; my dates are still young. May I ask you to send me some good wheat to experiment with in the Shúli district (3000 feet)? I

* It is *Schnizleinia* (*Hypoxis*) sp. n.—G. S..

† The rice was sent by Rosette.—G. S.

‡ Guatemala grass (*Euchlæna luxurians*).—G. S.

have just written to Kabréga for coffee to try at Agarú (4000 feet).

In my own interest, I shall use every endeavour to cultivate the various species of bamboo sent me, and I will let you know which kind thrives best. I have just received a collection of vegetables from M. Marquet and other friends in Khartúm. We grow all the vegetables which exist in the Sudān, as well as Colocasias, sweet potatoes, *Helmia bulbifera,* two kinds of Dioscorea, four kinds of Phaseolus, and sugar-cane. Melons do not grow well; water-melons, on the contrary, thrive splendidly, especially a kind sent me from Darfur, which we plant in the *kharīf,* and which the rain does not harm.

Although I am afraid of wearying you, I will once more return to the two points I have already mentioned. In the first place, send me somebody. I certainly do not advise you to send a scientific expedition consisting of several members; I do not wish such an expedition, for reasons not far to seek. What I do want is an explorer well up to his work, and not too proud to take a practical hint now and then. Good introductions from the Egyptian Government are necessary for Khartúm. I will defray the cost up here.

Secondly, would not the introduction of Chinese settle the slave-trade once and for all? Think over this matter carefully, and write me about it; I do not think that the proper methods have been yet followed or the proper measures taken. I should be sorry to pose as a critic, but I have had the opportunity of thoroughly learning the needs of this country.

And now my hearty greeting, and again a thousand thanks for all your interest and courtesy. Your sympathy is a great help to me in my difficult task.

3. On the Slave Question.

(From a Letter to Dr. G. Schweinfurth, dated Ladó, December 25, 1881.)

HORTICULTURE IN LADÓ—THE FIRST STEAM-ENGINE IN THE HEART OF AFRICA—ON THE ADMINISTRATION OF THE PROVINCE—BUDGET SURPLUSES—THE SLAVE QUESTION—DR. JUNKER'S OBSERVATIONS—DONGOLAUI OUTRAGES.

Just imagine! Our garden already yields to the Government nearly a thousand piastres monthly from vegetables and other produce. This is encouraging, is it not? We have just commenced irrigation by means of a steam-engine, which I asked for from Khartúm—the first engine at work in the heart of Africa. Now every one wishes to lay out a garden. My absence from here was prolonged for more than three months during my tour of inspection through the old *mudirië* of Rōl, where I finally suppressed the shamefully conducted slave-trade. I am therefore rather behind-hand with my work here, but I will soon make up for lost time. I venture to enclose some notes of this last journey, and you are at liberty to make what use you please of them. I can vouch for the scrupulous accuracy of the facts recorded. You will see from them that till now many things have been put up with which should not have been allowed. I have great doubts as it is whether my efforts in this direction will meet with approval in Khartúm, for energetic measures hardly seem to be in favour there. I have received a hint privately that, if I like to go there for a few days, there is nothing to prevent me (I have not been there since May 1877); I will, however, carefully consider the matter. I am thinking of a certain gift of Danaüs, and am too well acquainted with the Sudān and its ways to suppose that I can be a *persona grata*. Otherwise I am quite satisfied with the consideration shown me. But if I must confess the truth, I believe that no good can be done until this province is separated from the central Government and made quite independent, as it was in the days of Gordon and Baker. It is better not to write at all, when I have to wait five months for

an answer to every letter asking for the approval of new measures. The fact that this year, the first of real business, I have been able to obtain for the Government a net revenue of between five and six thousand pounds sterling proves that the province can support itself, notwithstanding Gordon's opposite opinion. Caoutchouc, oil, &c., are not included in this estimate.

January 31, 1882.

I have heard from Dr. Junker again to-day, and enclose his letter, begging you not to publish anything in it which is not geographical. This letter and those from Casati, which I likewise enclose, will, by the exceeding misery which they disclose, furnish the best proof of what I have just asserted. It will only be possible to produce salutary effects and to suppress outrages in this country when it is separated from Khartúm, and possesses an administration armed with all requisite authority. Here I sit gnashing my teeth and wasting my time in writing for permission to do this, that, or the other, which requests lead to nothing, while I might be up and doing. I do not even yet know where my frontier lies on the side towards that nest of slaves, the Bahr-el-Ghazal province, and whenever I send a proposal to Khartúm, it comes back again without a decision. What use are all the compliments showered on me and the politeness shown me? It is known that you write to me, and that I occasionally publish some information; hence all this attention. Junker has kept silence hitherto, but when he returns, unless something is actually done soon, he may make some disclosures which will be rather unpleasant for the Egyptian Government. The capture of slaves, and the slave caravans which travel daily from the southern districts northwards to the Bahr-el-Ghazal territory, and, alas! to Rumbĕk also, are undeniable facts. When I wrote to Khartúm, asking that Wando's and Kifa's territories might be placed under my command, so that I might erect two or three military stations there, and be able to render the transit of slaves impossible, I received the answer that the chiefs of those districts would perhaps be displeased if they were annexed to this territory. Naturally one loses all inclina-

tion to work when such answers as these are sent, based, as they are, on the most thorough misconception of circumstances. I at length sent a military expedition to Monbuttu to protect the country from the Danagla, but have been compelled to withdraw it, because I encountered the greatest difficulties at every step, and, having no power to decide questions myself, should have been obliged to report to Khartúm, and wait five or six months for an answer. Excuse this long jeremiad. You, who know this beautiful country, will understand better than any one else that this forced inactivity is the greatest curse to a man like myself.

4. On the Agriculture, Commerce, and Administration of the Equatorial Province.

(*Letters to Dr. G. Schweinfurth from Ladó, March* 3 *and* 18, 1883.)

THE MPAFU-TREE — AMOMUM FRUITS — LOMBO BULBS — TOMATOES — ATTEMPTS TO SOW BAMBOOS AND WHEAT—MAIZE—GUAVAS—ONIONS AND OIL-PALMS—SATISFACTORY BUDGET—NEGRO REVOLTS ON THE BAHR-EL-GHAZAL—PROJECTS FOR COLONISING CENTRAL AFRICA—ON MISSIONARY SOCIETIES AND THEIR PROSPECTS IN CENTRAL AFRICA—NEW STATION ON THE KIBBI—NEW ROUTE TO THE BAHR-EL-GHAZAL PROVINCE—CONDUCT OF THE DANAGLA—INDIARUBBER.

I AM sending you a box of seeds with this letter, and should particularly like to know the name of the tree which bears the three-cornered nuts that I enclose. I first met with this gigantic tree in 1876 in Ugánda, where some specimens of it grew beside my hut. They were twenty-one to twenty-five feet in circumference, and rose to a height of ninety to a hundred feet above the ground before throwing out branches, which formed a splendid broad crown. The fruits are olive-shaped, and are enclosed in a green husk, which smells of resin; after being dipped in hot water they are eaten. I only send you the kernels. The bark is light grey, thick, and cracked, and is strongly impregnated with resin. If a cut be made in it, a

viscous transparent resin of a very light green colour oozes out immediately. It becomes slightly turbid like milk on exposure to the air, and when fresh, gives out a powerful smell like that of cedar wood (*Oleum cedri*). This resin is dissolved by boiling it in oil, and is a favourite perfume among the natives. The wood is reddish, and very serviceable, as it is not attacked by insects. In Ugánda this tree is called *mpafu*, and Cameron mentions it. . . . . .

Specimens of the fruits of *Calamus secundiflorus* are likewise enclosed, but you will perhaps take more interest in those of *Musa ensete*, which I found fairly abundant round Tomayá. The fruits are fresh, so perhaps they will sprout. Did the Helmia* bulbs reach you safely (through M. Vossion)? Would you like specimens of caoutchouc, and shall I send other kinds of resin? I have also sent some fruits and seeds of Amomum, which is very common everywhere; perhaps a practical use for it might be discovered. The people here use the crushed seeds to mix with coffee, just as the Egyptians use their *habbe hān*, Abyssinian seeds of the same plant. If the tubers [of the *kambo* plant] come in time, I will send you a basketful of them. The tomatoes were as large as my fist at our station of Janda (4100 feet), while in Ladó they are very diminutive.

I am able to send a good report of my agricultural experiments. Among the varieties of bamboo that were kindly sent me, *Bambusa arundinacea* and *Dendrocalamus strictus* have made a good start, and I have great hopes of them. I have not been so fortunate with the Italian *peperoni*. The cultivation of the *Zea mays* (American seeds) is spreading slowly among the Negroes; rice is thriving splendidly in Ladó and Dufilé, and is now going to be cultivated also in Makraká (at Rimo). I brought a small sample of wheat from Khartúm, where the missionaries grew it from Algerian seeds. The result was good, only the birds will not leave the ears alone. I have sent some of the seeds produced here to Makraká and to the southern stations, so that its cultivation may be tried there. Vine stocks have taken root at last, after failing at least ten times. The *Carica papaya* † has spread from here over the Bahr-el-Ghazal terri-

* They are still growing in several of the gardens in Cairo.—G. S.

† Dr. Emin brought it from Ugánda in 1874.—G. S.

tory. Guavas thrive and bear plentifully. I am now sending you some shoots. I am sorry that I have no mangoes, and the seeds you spoke to me about have never reached me. I am cultivating ground-nuts largely; their oil is our substitute for butter. Onions are cultivated at all the stations, and thrive especially well in Dufilé and Makraká. The love of gardening and cultivation has much increased among my people during the past year, and I daily receive letters begging me for seeds and plants. Our soldiers and officers are now quite aware that a well-tended garden affords not only amusement but tangible advantages. When, however, the plant or fruit arrives at maturity, it is consumed—you know the Negro character—no one dreams of reserving seed for the next planting, for is not Emin Bey in Ladó in order to provide seed? I have hundreds of times sent seeds to the people, and asked them to preserve some; they have over and over again promised to do so, but when sowing-time comes, they invariably apply to me for a fresh supply. They have, however, improved a little lately, and with time and patience I think I shall bring them to better ways. The planting of *Elais guineensis* is what I have now most at heart; seeds are on the way from Monbuttu, and I shall begin to plant them as soon as they arrive. Date palms do well; here they are still small—some forty feet—but in Makraká they have borne fruit this year. I am expecting pineapples by this steamer, which I begged of M. Marquet in Khartúm. The coffee * you sent me would not bud. What do you think of trying Cinchona?

The net revenue of the past year remaining at the disposal of the Government, after all salaries, expenses, &c., have been deducted, amounts to £8000 sterling, of which the greater part has been paid into the Government treasury at Khartúm. The trifling sums which I obtained from there, after many requests, have been spent in paying arrears of salary (1879–1880). But it seems as if the Government did not value this province much; for instance, during the year 1882, only one steamer was sent here—that which brought me from Khartúm.† This steamer, too, carried no goods, my petition

* *Caffea liberica* from West Africa.—G. S.

† Dr. Emin arrived in Khartúm on March 7, 1882, and left on June 15, 1882.—G. S.

for a larger boat to take goods having been refused. The prohibition against merchants coming here was also retained, in spite of my earnest appeals that it might be annulled; therefore, ever since December of 1881, the officials have been absolutely cut off from all supplies, and have consequently experienced greater distress than in the year 1878–9, when the river was closed. Gordon, however, allowed merchants to come here, for he clearly saw how absurd such a measure was as a preventive against the export of slaves from this country. Well, the legislators in Khartúm—foreigners and Arabs—may understand these things better than one like myself, who is not a Pasha; but I can tell you one thing, and that is, that under the present system they may quietly draw their pens through the names of our provinces in a couple of years. It is so ridiculous to dream of stopping the slave-trade in the Sudān by setting up a slave department in Khartúm with branch offices; to try and tie up our districts with the red tape of Egyptian bureaucratism is an idea that makes one's hair stand on end. If the Government, besides the exploitation of the interior of Africa for pecuniary ends, which seems to have been the cue latterly, is really bent on carrying on a humanitarian mission there—and that was certainly Ismaïl Pasha's intention—it can, in my opinion, only be done by uniting the Negro districts—the Bahr-el-Ghazal and the Equatorial Provinces—and separating them entirely from the Arab portions of the Sudān. Then a capable European Governor must be found for them, who has a love for the work, and will take an interest in the country, not one who does not care whether "blue men or green live by the Albert Lake." He should have three to four steamers at his disposal, and should be commissioned to work out the details of the organisation, of the exploitation of the country, of the disposal of the products, and of matters affecting the slave-trade in conjunction with us, the local Governors. A commission in Khartúm for slavery affairs, consisting of the Governor of the Sudān, or his representative, and the consuls, as well as five to six trustworthy natives, Mohammedans and Christians, should be in direct communication with the Governor of the Negro districts, whose residence should be at Sobat. Fashoda would of course

be given up as a *mudirië*. But these are all dreams, and their realisation will not become a necessity until later years, when I have long been dead. Excuse this digression; out of a full heart the mouth speaketh. My position is not an enviable one, as I have already hinted, for our province has received absolutely no support at present. We certainly cannot blame officials who have been left a whole year without supplies if they do their duty reluctantly and ask for their discharge at every opportunity. Since June 15, 1882, the day I left Khartúm, until to-day, March 6, 1883, I have received neither letters nor news from there, nor has a steamer been sent up here. Supposing that the river is blocked again, which I begin to fear is the case—for I can think of no other explanation of the dilatoriness at Khartúm—would it not then be the duty of the Government to send me news by the Bahr-el-Ghazal, whither steamers have twice been sent? Must I call their conduct towards us negligence? Is it not rather want of consideration? Hitherto my personal influence has kept things in order, and made the Negroes my allies, but I begin to be tired of it, for I see that the Government does not understand us, and never will; and if I retire, things will fall to pieces here in a very short time, and then they will have a nice task before them.

You have heard of the Negro revolts on the Bahr-el-Ghazal? It seems that the Negroes there have had enough of being regarded only as "things" from which every possible service is to be extorted, and which are then to be maltreated in return for the work they have done. After many years' experience of the Negroes, and intimacy with them, I have really no hopes at all of a regeneration of Negroes by Negroes—I know my own men too well for that—nor have I yet been able to bring myself to believe in the hazy sentimentalism which attempts the conversion and blessing of the Negroes by translations of the New Testament and by "moral pocket-handkerchiefs" alone; but I do not on that account despair of the accomplishment of our task, viz., the opening up and consequent civilisation of the African continent. It will no doubt be a work of time, and whoever devotes himself to the task must from the first give up all thoughts of fame and of his services being acknowledged.

But Europe possesses energy for anything, and if one man dies, another will take his place and carry on his work. It is strange that Europeans have left our countries quite out of sight, and prefer to pour money into the interior by the somewhat worn-out route from Zanzibar, and to enhance the greatness of Sultan Mirambo, and heroes of his stamp, by tribute. If only a thousandth part of the sums expended on those expeditions, which were, however, intended to form stations, had been employed in fitting out a small expedition—of Germans of course, I should prefer—and sending it here, I would have sent it forward into the still unoccupied country to the south of Makraká—a real paradise. The men would have been within a few days' march of us and in constant contact with the world, in a healthy mountain region, and would have become a protection and a blessing to the surrounding Negroes. Small stations would in a very short time have been thrown forward to the Congo through the entirely unknown district extending from the western shore of the Albert Nyanza to Nyangwe, or an advance might have been made to the Beatrice Gulf, and finally to the Tanganyika. Has the King of the Belgians no means of forming such a station? And would it be quite impossible for you to start something of the sort? Of course, you must not mention me in connection with it, but you may be sure that the men who come may depend on my complete and most zealous support. I must, however, make one remark: I am not speaking of an exploring party, but of the founding of a station, a centre, in fact, for future explorations. The station should maintain itself by hunting, tillage, gardening, &c. (ivory!!). The staff should be chosen with a view to this—men who are not only able to command and to take the altitude of a star, but who know how to work occasionally, and do not disdain to take a look into the cooking-pot. As an experienced traveller, you will certainly admit that a man who wishes to live and work here would also do better to leave the spirit-bottle behind in Europe. What boundless advantages the country itself would derive from such beginnings! Much more effective support to our struggles against slavery would be afforded by the presence of several Europeans than by that of ten Consuls in

Khartúm, or by enlarged and emended editions of Anglo-Egyptian slave conventions! But if Europeans have no money for such purposes, or prefer to waste men and means from Zanzibar, we have at any rate the missionaries.

I took a great deal of pains during my stay in Khartúm to prevail on the mission there to undertake the establishment of stations in this country, not in the foolish manner of past times, but after the model of the French station in Bagamoyo, though perhaps with rather less religious ballast and less psalm-singing. Whether they were alarmed by Mgr. Comboni's death, or what it was, I do not know, but there was so much talk of getting permission from Rome, temporary difficulties, want of money, &c., that nothing is to be hoped for in that direction. The C. M. S. do not see their way to send a mission here; the other societies may think differently, but I have no connexion with them; and the Germans—do you suppose they have money for the purpose? There remains only Mgr. Lavigerie, with his Turcos and Zouaves—what do you think of my opening a correspondence with him? From what I see and hear, he would be just the man to take an interest in this kind of thing, and he seems to have means enough at command to go to work at once, which is just what I want; for I should like before my death to have a better guarantee for the preservation of the work I have done than could be afforded by the prospect of seeing a highly respectable Bey step into my place, who would neither understand nor love the country and its inhabitants. I refrain for the present from further and longer explanations; *a buon intenditore poche parole.* You are almost the only one who really knows our country, and takes an interest in its prosperity and misfortunes, and for that very reason I was unwilling to keep these ideas from you. Should you be able to interest yourself in my dreams, and to make your influence felt on behalf of this country, which you have been the principal instrument in making known to the world, my half-formed projects will soon take shape under your hand and become realised, to my great satisfaction. Pray do not blame me for troubling you by asking your help and advice—I have no one that I can trust, and am, too, an official. I beg you, therefore, to consider all my utterances as quite private, but above all to let me know your views, and, should

my plans appear to you practicable, to proceed to put them into execution as far as possible without delay. I may appear to you rather egotistical, but does not every gardener seek to protect the flowers which bloom under his care?

Our country has remained quite quiet at present. About six hundredweight of ivory lies in the magazines, and a quantity of tamarinds, ostrich feathers, Butyrospermum fat, Arachis oil, hides, &c., are waiting to be disposed of. My men have erected a new station on the Kibi, and another party is going to occupy the road between it and the station of Wádelai, so that the ivory may now be sent from the station of Kúbi in Monbuttu to those of Tambira and Lógo on the upper Kibali, and thence past the new station on the Kibi to Wádelai, whence the steamer will bring it to Dufilé. In the east, also, the station of Tárangole is finished, and that of Lobbōr, which will join the line of Fajulli, Facher, Farshile, is in course of erection. The flora of the tablelands in the east differs entirely from that of this neighbourhood, and is much more similar to that of Kordofan.

I brought rather rich zoological collections from my last tour to the south-south-east, and, as far as I can decide with my small supply of literature, I shall be able to send to Dr. Hartlaub, my amiable correspondent, eight or nine new species of birds and two new mammals. I should like to have collected insects, but I had no pins. As for anthropological objects, I have some crania to send to Europe. Should you like some for Virchow? I have made a good number of measurements, among others six to eight of Akká (♀ and ♂), all according to Broca's scheme, which M. Vossion * kindly gave me, with a splendid portable apparatus for measuring. This is very different from the conduct of the Government, for I have twice applied to it, and written privately to Stone Pasha to get some instruments I wanted—particularly a small altazimuth instrument, or at any rate a theodolite and chronometers—either on loan or to be paid for out of my salary: of course they have neither time nor inclination in Egypt for such matters. It does not signify, however, for I have already

* He was at the time the French Vice-consul in Khartúm, and is at present French Consul-General at Philadelphia.

made other arrangements, and what instruments I do possess are my own property. It is, however, rather annoying to hear men in power hold forth continually about their appreciation of science, and then to receive nothing but empty phrases when one applies to them.

Our communication with the Bahr-el-Ghazal territory has been interrupted for a long time, at least by the usual post-road which runs from here through Amadi, Ayák, and Rumbēk to Gōk-el-Hassan and Jur Ghattas, for the Dinka round Jur Ghattas have revolted, and the Bongo round Gōk-el-Hassan have joined them. I have therefore opened a new route, passing through Makraká to Gosa, and thence northwards through Sabbi to Wau. Of course this is a much longer road, so I have received no news from there for the last three months. I hear reports of two steamers having arrived there to take so-called *basinger* to Khartúm as recruits; this will, of course, not fail to increase the existing discontent considerably, for our Negroes do not like to leave their native country, and the thought of going to Khartúm is quite horrible to them. We do not know what is going on in Fashoda and the neighbourhood, for the Government prefers to leave us in the dark. Darfur is probably already lost to the Government, for Slatin wrote several times to Lupton asking for assistance, as his situation was really desperate, but Lupton had to refuse it, as he could not trust his own province. Five to six thousand Danagla still live in the Bahr-el-Ghazal territory, just as they did in Gessi's time, although he emphatically asserted that he had sent them all away. As regards my own—and I have a good share of them, and cannot dispense with them, having no soldiers—I have nothing to complain of. I have kept them in order with a rod of iron, much as a battalion of Bashi-Bazuks is held in check; they do not love me, but they fear me, and therefore obey. It may be that certain rather singular situations, from which I fortunately came out in triumph, have thrown a sort of halo round me. I hope that all will go on smoothly with us, and that the youngest province of the Egyptian dominion will also be the most sensible.

After the arrival of the steamer from Khartúm, March 18, 1883.

I can supply large quantities of caoutchouc; unfortunately I cannot enter into direct communication with the commercial world, but am obliged to deliver all produce at Khartúm (with gnashing of teeth!), and receive in exchange the very worst goods at the highest prices in lieu of monthly pay. Set me free, entrust me with the independent control of this country, and I will show the Egyptian Government what our province can do.

I have been obliged to answer the letter Mr. L. Holz was so kind as to send by a refusal. That I should prefer German trade is certain;—only think what a trade could be opened up in ivory, oil of all kinds, skins, corn, ostrich feathers, Butyrospermum fat, indiarubber, wax, iron, &c., &c. It would appear as if the time had come when they [the Government] intend to make good former mistakes, among which I include the celebrated division of the Sudān into four parts, and the appointment of a Sudān Ministry in Cairo. Just think how ridiculous it is to join into one province the Bahr-el-Ghazal and Dongola with Darfur and Kordofan!

If they wish to centralise the administration, well and good; let them divide the Sudān into administrative districts thus—(1) Darfur and Kordofan, (2) Dongola and Berber, (3) Khartúm and Sennār, (4) the Eastern Sudān (Kassala, Suakin, Massaua), (5) Harar, (6) Bahr-el-Ghazal and Hat-el-Istiva (Equatorial Provinces).

Each of these natural provinces should be administered by a *Mudir*, two local officials, and a finance bureau. Would not this be cheaper? And then, instead of giving £30,000 for a Sudān Ministry, place the whole district under the Home Minister, and spend the money in building telegraphs!

But an end to complaints.

5. The Sudān and the Equatorial Province in the Summer of 1882.

The revolt of the Mahdi—A voyage up the Nile from Khartúm to Ladó.

The condition of affairs in Khartúm was so very disagreeable that I was really glad to leave the place [June 15, 1882]. You know, of course, from the newspaper reports—which, by the way, are often rather coloured—that a year ago a certain Mohammed Ahmed, who had been held by the Arabs to be a kind of prophet, on account of his contemplative life, suddenly gave himself out to be the Mahdi—the last prophet—and commenced his new career by sending letters to the Governor-General, and the governors and chiefs of the tribes, requiring them to recognise his superior (spiritual) authority, to turn from their bad way of life, to cease oppressing the people, and to be ready to obey his orders. A small group of excited Arabs, mostly those of his own tribe, flocked to him. Now, instead of immediately sending an intelligent officer and a detachment of troops with an order to take the prophet a prisoner at once, the Governor-General thought it good to send as Commissioner the noted Abu Saud to investigate matters, and at the same time to send a company of soldiers to bring the prophet to Khartúm. Now, whilst Abu Saud, after several theological discussions, returned with his steamer to rest on his laurels, the soldiers attacked the prophet the same night, but were annihilated, and their arms and ammunition fell into the Arabs' hands; Abu Saud steamed to Khartúm and reported his theological results.

If, even then, energetic action had been taken, the whole of the affair would have been ended in a few days, for such religious assemblies, even on a larger scale, are far from rare in the East. Only call to mind the Babite movement in Persia, the Wahabite war in Nejd, and similar proceedings in Yemen. Unfortunately, the Governor of Fashoda received a command to punish the rebels; and whilst the Mahdi, with a well-armed and largely recruited following, crossed the Nile, marched to

the west, and, now in open rebellion, preached to the Bakara a war against the Turks (Egyptians), the troops of Fashoda, regulars and irregulars, plundered the Arab villages to the east of the Nile, and drove loyal inhabitants into the rebels' arms. Rauf Pasha now probably saw that it was impossible to quench a fire with oil, so he gave strict orders to the Governor of Fashoda to retire on that town, and to act entirely on the defensive.

In the meantime, the Mahdi had taken up a fortified position in the mountains on the other side of Fashoda, and openly declared his intention of remaining there till the end of the rainy season, and of then marching on Kordofan. His emissaries were sent out in all directions, inviting the people to join his standard, and they found them willing enough to listen, especially those on the Blue Nile, where several solitary *Shurefa* (descendants of the Prophet's family) and *Fukaha* (priests of a low grade) possessed very considerable settlements and lands. At this time, reinforcements to the number of four thousand men, which Rauf Pasha had very wisely requested, were being mobilised in Egypt. He had not sufficient troops, and did not wish to take the responsibility of using irregulars, or of fighting Sudānese with Sudānese. Unfortunately, the Governor of Fashoda undertook to show what a capable official could do, so a very large expedition, led by him in person, and which was also joined by the chief of the Shíluk, marched with the utmost rapidity against the rebels; but as the soldiers were permitted no time to rest, nor provided with water or food, they were nearly all destroyed, the leader also paying for his folly with his life.

Although it would have been an easy matter for the Mahdi to have taken Fashoda at once, he refrained from taking any aggressive action, remaining true to his programme. Rauf Pasha was recalled, and the command given into the hands of the Vice-Governor, Giegler Pasha, who commenced at once to arrange a mighty expedition, composed of many regular troops, large numbers of irregulars, Barabra and Danagla, of all kinds and colours; and Yussuf Pasha Hassan, himself an irregular, was placed in command. This man was well known through Gessi Pasha's reports on his slave-dealing affairs. The troops

which Rauf Pasha had demanded were said to be quite unnecessary; the Government in Khartúm was quite able to crush the rebels with the resources at its own command.

Whilst this expedition was still on its way, and amusing itself with drinking *mrisa*—for an irregular never travels without a pot of beer, a rosary for prayer, and one or two concubines—the smouldering fires of rebellion broke out in Kordofan and in Sennār, and the Government of Khartúm was hardly able to supply half the aid in men and ammunition demanded from it on all sides. In Sennār especially things came to such a pass that the town of Sennār was set on fire, the Governor and his few soldiers were driven into the fortified barracks and there besieged, and the whole land was filled with murder and the most shocking anarchy.

Although Giegler Pasha himself went with a small steamer to Sennār, the Government would have lost the whole district, had it not been for the united exertions of Salih-Aga, a very brave leader of some irregular troops, and Awad-el-Kerim, the great Shukurie chief, who personally led two thousand horsemen into the fight, and so saved Khartúm from a like fate. In Kordofan, too, villages were burned and the people murdered. Communications in all directions were discontinued, and if the situation improved a little after the victory in Sennār, whereby the Government regained to some extent its former prestige, yet the new Governor-General and Minister of the Sudān, Abd-el-Kader Pasha, who arrived about this time, found plenty to do.

As the official duties connected with my province fully occupy my time, I am not able to write much more concerning the last few days of my stay in Khartúm. The situation in Kordofan appeared to be very critical, and we all waited anxiously for news of Yussuf Pasha's great army. The news, too, which came from Egypt gave us enough to think about. Notwithstanding the extreme kindness of both Europeans and Arabs, I was, as I have already said, heartily glad when the steamer *Ismaïlia*, which had been placed at my disposal by Abd-el-Kader Pasha, steamed into the White Nile, and I had once more the pleasure of ascending its majestic waters. Descriptions of this district have been too often given for me

to add another; we could not land anywhere without running the risk of being attacked, and neither soldiers nor arms were on board, so we steamed direct to Kawa, which is the last telegraph station and wooding-place for all the Khartúm steamers.

The woods of acacias (*Acacia nilotica*), which extend for miles along the banks of the river, have been considerably thinned; still they will last for many a long year to come, especially if the present stupid waste of wood is somewhat curtailed. Of course no one ever thinks of planting fresh trees. The traveller from the north meets in these woods for the first time very numerous long-tailed monkeys (*Cercopithecus griseo-viridis*), screeching swarms of green parrots (*Palæornis torquatus*), and, as rare visitors, and therefore all the more welcome, the small Galago (*Galago senegalensis*), beautiful, easily tamed animals.

After taking on board a sufficient quantity of wood, and receiving the last telegrams from Khartúm, we steamed to the south, soon left the last mountains behind us, and reached Fashoda, where we received the almost crushing intelligence of the nearly total annihilation of Yussuf Pasha's army; of about five thousand men, hardly two hundred had been able to escape. This, then, was the end of an expedition which had been placed upon the stage in such a pompous manner. The chief causes which led to this catastrophe were the thorough incompetence of the leader, who scorned the advice of the regular officers placed under his command, a carelessness and heedlessness almost bordering on insanity, the indispensable beer-jars, and the use of the beasts of burden for transporting goods and courtesans from Fashoda, instead of carrying water for the soldiers, who were half killed by thirst. The town (Fashoda), in which only a few soldiers remained, was in the greatest danger of being captured by a sudden blow, in addition to which, the Shíluk, angered by the death of their chief, who had accompanied the Governor of Fashoda in his unfortunate expedition, refused to obey orders, and remained at a distance from the town.

After steaming about twelve hours, we reached the station of Sobat, which is situated upon the high south bank of the river of the same name. It was erected by Gordon Pasha for

the purpose of having the steamers coming from the Bahr-el-Ghazal and Bahr-el-Jebel searched for slaves. This station originally belonged to the Equatorial province, but it was subsequently placed in the *mudirië* of Fashoda; the people, however, from Fashoda had only used the station in order to make *razzias* into the country entrusted to my care; therefore, as my complaints had not been heeded, and the station had also been evacuated at the beginning of the present difficulties, I had requested the Governor-General to make the station over to me again, and he had granted my request. The reason I asked for it back was that I wished, by reoccupying the Sobat, and by erecting two or three small stations between it and my station at Bōr, to establish a post-road, which would enable me to be independent of the arrival or non-arrival of steamers from Khartúm, and which I might also use, in case of blocks in the Nile, to send my correspondence safely and expeditiously to Khartúm. After arriving at the Sobat, where some two thousand Shíluk assembled to meet us, I was able to make the necessary arrangements with their chiefs. The three days that we remained there cutting wood were passed on the best of terms with the natives, who brought very large quantities of provisions for sale, such as flour, durrah, fowls, and fish, as also straw mats; iron and tobacco were the articles most sought for in exchange. From the Sobat to the station of Shambe, a distance of about a hundred hours' steaming, we had to pass through a monotonous, depressing stretch of swamp. Broad lake-like expanses of water, large swampy reed islands, tufts of papyrus, groves of *ambaj*, and more rarely small strips of firm ground, alternated constantly with each other, and only very seldom could a solitary tree be seen. There was, however, no lack of material for the observer, for hosts of various kinds of Diptera would have gladdened the heart of any entomologist, and there were millions of bloodthirsty mosquitos, against which it was almost impossible to protect oneself. Any one without sufficient interest in entomology to sacrifice his blood to the cause, would wish, as I did, to be again on land. The small station of Shambe, which we reached after more than four days' steaming, affords the traveller a very desirable rest. This station is really nothing but a wooding-place, and is only

of interest because it is the starting-point of the road which runs through the Dinka country to the Bahr-el-Ghazal.

It was really pleasant, after my long absence, to be once more in my own district and amongst the Negroes, with whom a long residence has made me very intimate. I received here the first news from the Bahr-el-Ghazal, that the Rizegat on its northern boundary had rebelled, and that the Bakara, who had been incited by the emissaries of the Mahdi, were giving a great deal of trouble to Lupton Bey, my former assistant, now Governor of the Bahr-el-Ghazal district. It appears, therefore, that the most distant possession of Egypt, the Equatorial province, is at this moment the only part of her entire dominions which is perfectly tranquil.

The station of Bōr was, as usual, in a very neat and clean condition; it is surrounded by extensive gardens, and its garrison lives on the best footing with the thousands of Negroes who reside in the neighbourhood, and who have learnt to feel like men since I drove the Danagla from this place, and so put an end to the slave-trade here. The Government, too, has gained materially by this transaction, for the tax in grain, the only tax which I have imposed, has been almost doubled in amount. The people, who formerly left their homes, and who preferred to lead a miserable life as fishers on the numerous islands in the river, rather than lose their children, have gradually returned home, and have recommenced to cultivate extensive stretches of land which they had left lying fallow. The whole district between Bōr and Ladó on the west bank of the river, is an almost unbroken line of villages and huts, and even where the Dinka give place to the Shīr (who are Bari), new fields and plantations have started into existence. All that is needed is to protect the Negro population, and unrelentingly to prevent the old *razzias* for men and cattle; the Negroes will themselves see to the spreading and increase of the population. The Dinka, who possess large herds, were once the most oppressed of the natives, and now they have already extended far beyond their original boundaries.

Ladó, my capital, celebrated on account of its storms, its thunder and lightning, and heat, suffered this year from want of rain, so that in many places the first crops of durrah were

spoilt. The drought, however, is at an end; I and the rain seem to have arrived together, for it pours in a continuous torrent. It is almost impossible to see a bit of blue sky for half an hour together. During my absence some trouble had also taken place in my district. I was away, and the cattle were tempting, so the people made a few *razzias*, which, remarkably enough, their instigators had paid for with their lives, for the Negroes have at last learnt not to be ill-used for nothing. I hope that my people will remember this in the future. In all other respects everything is quiet, and the news I have received from the south, from the Albert Lake, from the east, from Latúka and Fadibék, from the west and south-west, from Makraká and Monbuttu, all tells of the greatest tranquillity. Kabréga, king of Unyóro, has again sent me an invitation to visit him; unfortunately, I am at the present moment unable to accede to his request, as other and more important affairs await my attention, and therefore I have no time for paying such visits.

6. Three Letters to Dr. G. Schweinfurth.

I.

A JOURNEY IN MONBUTTU—THE MONDÚ AND BABUKUR—DISTRIBUTION OF THE OIL-PALM—A COMPARISON OF THE FLORA OF UGÁNDA AND MONBUTTU—MEETING WITH ZANDĒ CHIEFS—MUNZA'S GENEALOGY—RUMBĒK CAPTURED BY THE DINKA—THE DONGU—FIRST SIGNS OF THE REBELLION IN THE SUDĀN—THE ORIGIN OF THE MONBUTTU—LETTERS FROM JUNKER AND LUPTON—COMMUNICATION WITH THE NORTH DESTROYED—MONBUTTU MEDICINES—ARRIVAL OF JUNKER—BAHR-EL-GHAZAL TAKEN BY THE REBELS.

Bellima, Monbuttu, *June* 21, 1883.

Where could I better begin this letter to you than amongst the people whose name you first gave to the world, and at the edge of one of those wonderful "gallery" woods that you so accurately described? It seems almost like a dream to find

myself in the middle of Monbuttu, and the spell of the illusion is kept up by the strange forms which surround me, and by the almost overpowering splendour of the flora and fauna, in which I daily meet with new forms. And yet I really am in Monbuttu, and only half an hour ago King Munza's daughter led her two small boys to me and told me of the former splendour of her father's house.

It was a curious chain of circumstances which changed the direction of my route and led me here. You must therefore have patience if my story is rather long. As the transport of corn and ivory was overburdening the inhabitants of Makraká and causing complaints, I conceived the wish to visit the upper course of the Kibali in order to investigate the possibility of navigating it, so that, if possible, I might utilise it for the transport of ivory from Monbuttu as far as Kalika. Our station of Lógo, situated at the junction of the Nzolo with the Kibali, together with the station of Tambira, would then form good points of support. With this idea in view, I started, and intended to march *viâ* Wandi and Ndírfi southwards to Lógo and Tambira, where I could take up my headquarters. To the west of the latter place the road led *viâ* Gango to Kúbi and Tingazi, our chief stations in Monbuttu, and to the east through the Lógo and Amadi districts to our stations of Kalika and Wádelai. However, when I arrived at Ndírfi, such disquieting news of the state of affairs in the Zandē countries came to my ears, that, instead of going direct to the south, I struck west, and, passing by Tobo and Tendia, I reached our station of Mundú, on the Dongu. The report which had already reached Ladó that a large number of the Zandē chiefs, supported by their connexions in Makraká and Monbuttu, had determined to withdraw themselves from their allegiance to the Government, proved here to be a fact.

In order to make the state of affairs clear to you, I may say that the chiefs mostly concerned were either those who from being simple dragomans or gun-boys (*farūkh*), had been made chiefs by the Danagla, or those freebooters who by force of arms had usurped the power of the real chiefs. A chain of such robber nests had been established to the west between Ansea and Wando; another along the line of the Dongu, where

the scoundrels had monopolised the ford of that river and cut off our road to Monbuttu. They had been informed of the difficulties of the Government in Khartúm by their correspondents in Makraká, they were also well acquainted with the disorder and rebellion in the Bahr-el-Ghazal district, and they therefore apparently thought the time had come for them to play a little comedy for my benefit.

Shortly before my arrival in Mundú, one of them, emboldened by the possession of thirty-five guns which he had somehow or other managed to collect together, terrorised over the country, and systematically kidnapped women. He also thought fit to take prisoner an officer who was travelling from Monbuttu to Makraká, to keep him a fortnight in custody, also to rob other travellers of their arms and servants, and at the same time to declare openly that he was the lord of the land and recognised no authority higher than his own. This was too much even for my patience, and in the face of the agitation which had existed for some time in Monbuttu, it was necessary to make some energetic move. I had, however, no soldiers with me, for they had all been sent from Tendia to Lógo. When, therefore, a number of the small chiefs just mentioned refused to accept my invitation to meet me, thus openly disobeying, I went by night with ten men to the village of the nearest chief among them, and before the people had time to get their guns, I took him prisoner. With the greatest ease I confiscated some twenty guns, and after I had assured the people that neither they nor their goods should come to harm, I retired to the station, and immediately sent my prisoner to the east, where, during his banishment, he will have time to consider whether or not it is advisable to play with the fire. On the same day a great meeting was held, a new chief was elected and placed in office, and then I marched as fast as possible to the south to arrest the possessor of thirty-five guns. He was, however, too quick for me, and had vanished, but I obtained the guns, and therefore rendered him harmless, even should he attempt mischief elsewhere. In a meeting of more than forty Zandē chiefs, the runaway was declared deposed, and the rightful heir to the district was appointed in his place; but the Zandē were most impressed by the fact of

my returning to their relations all the women who had been captured. With one blow, therefore, peace was restored and the road reopened, at least here, whilst the district in the west will have to wait a little.

Monbuttu now lay before me, from whence I was receiving letters every day requesting my personal presence to put matters in order. I determined to go there at once, as I was able to spare a few days.

After crossing the Dongu near the small military station of the same name (the river was a hundred and twenty-five feet broad and eight feet deep, and had many rapids), we marched through the narrow strip of Zandē country which lay between it and the banks of the Kibali, which we reached at midday on the 15th of June. All the Zandē call the Kibali Makua. The Zandē word *Welle* means, as far as I can make out, "the river *par excellence*," in contradistinction to small streams. At the place where we crossed the river it was two hundred and forty feet broad, twelve feet deep, and flowed at the rate of fifty-seven feet per minute. You may believe me when I tell you that at this point I thought very much of you, especially when one of my soldiers, who was born in Kuka, made the remark that the river we were crossing was probably *his* river [*i.e.*, the Shari].

We were now in Monbuttu proper, although the whole of this part of the country is inhabited by a tribe which the real Monbuttu call Bamba, and the Zandē, Abangba, and which is actually identical with your Abanga. It is a very interesting fact, and one which illustrates well the movements and wanderings of this tribe, that the Mundú, or Mondú, of the Makraká country are really identical with these Bamba, who, it may be supposed, were driven by the Zandē to the east, and thus separated from their relations many long years ago. The language of the Mundú, which differs entirely from that spoken by the other tribes living in Makraká, is identical with that of the Bamba, and many of my people from Mundú met with their relations here. The Nyapú and the A-Bárambo, both aboriginal inhabitants of the country, known to-day as Monbuttu, are also related by identity of language to both the Mundú and Bamba. Another branch of the Monbuttu family,

which is at present completely cut off from all connexion with them, are the Babukur, and they too are also found here in the south, under the name of Mayanga. But excuse this digression; it was my intention to describe to you my journey, and I drift into hypotheses! My learned colleague and friend, Dr. Junker, who has worked here for so long, will treat of all this far better than I can ever do.

At every step which I took from the Kibali to the south, my admiration of the country increased, and the glorious vegetation perfectly enchanted me. I was very glad, therefore, to stay for a few days in Bellima, Gambari's head-quarters, before proceeding to the south. Many changes have taken place since you visited Monbuttu, and now any one wishing to study the people and their customs must leave the beaten paths and seek out more remote parts of the country than Kúbi or Tingazi. One thing, however, no misery, no misgovernment, has been able to overcloud, and that is the magnificence of Nature, its sublime woods and "galleries." How often, as I have wandered under these high domes, has the beautiful old song occurred to me, "Wer hat dich, du grüner Wald, aufgebaut so hoch da oben?"

I have taken all possible trouble to utilise to the utmost extent my few days' stay in this place, and have, of course, managed to procure a few seeds and "curios" for you. Owing to want of paper, it has been simply impossible to collect plants. The last steamer brought me only a very few newspapers, which I had to use in packing bird-skins, &c.; but do not be disappointed; you shall, notwithstanding, have some plants from here. I have very often seen the *kola* nut here, and have collected some of the thick banana-like fruits which contain the seeds. The people use the latter as a cure for hemorrhage. I am afraid that those I sent you will not grow, for I could not obtain any perfectly ripe ones. Another seed is found in this country which is so like that of the *kola* nut that it is quite possible to mistake it. It has, however, a sharp taste, sharper than the strongest onion, and it produces extreme intoxication if eaten. The Monbuttu call these seeds *envamu*, and the great chiefs use them exclusively as an article of luxury. A kind of nutmeg is also very common. It grows

on beautiful high trees of the same kind as those I saw in Ugánda, where they appear to be confined to the lowlands. The variety and abundance of species of Anona are very noticeable. I send you the seeds of one of them, called *mámbara*, which yields bright yellow fruits larger than a pine-apple and distinguished by an acid taste. If it were possible to improve their cultivation, they would become a magnificent fruit. I have collected a considerable quantity of Elaïs seeds, and if I return to Ladó I will have this beautiful tree planted everywhere. Its most northerly limit in our district, as far as I know, is in Makraká, where I saw it spontaneously growing upon the small islands in the Yeï. I imagine that the seeds had been carried down the river from the south. I see from a letter from Lupton Bey that the Elaïs palm is found to the west of the Bahr-el-Ghazal district as far as 6° N. lat. Seeds from there have been planted in Ladó. I may take it for granted beforehand that you will be satisfied with the sample of caoutchouc I sent you. The juice was collected, according to my instructions, without mixing it with water, and was then simply thickened over the fire and smoked. Masses of it could be collected in this country, as both species of the Landolphia are very common. The juice is used in a remarkable way here as an application in the treatment of dry skin diseases. The affected places are painted with it, and it forms an impermeable layer over the diseased skin. The facts which you establish with regard to the flora of this land, namely, the predominance of pure westerly forms and species, I can corroborate with regard to the fauna, on the basis of my zoological collections. But this was only what I expected from the first. The want of text-books prevents me determining more than a very small portion of my collections, but I believe that I have already collected much of interest and several completely new species.

My stay here is not exactly pleasant; on the day of my arrival the people commenced to complain of pricking and burning in the skin, and several especially susceptible individuals suffered from small swellings, chiefly on their hands and feet, as well as feverish symptoms. My turn came next; purplish-red spots appeared upon my neck, face, and hands,

exactly like petechiæ, in the centre of which small hard prominences appeared, accompanied by severe burning, and they lasted for a long time. The cause of this affection was inexplicable to me, until I found that it was produced by the bite of a microscopic fly, which is unnoticed at the time, but which gives rise to the results I have just described. I hope that a change of air will free us from this affection, but I am told that these flies are always found where many bananas grow. Now there are plenty of bananas in this country, for, whereas in Ugánda, the banana country, only three kinds are cultivated, more than ten kinds grow here, artificial varieties like the dates in Tripoli. I have myself only seen four kinds, differing very considerably from each other. One of them bore fruit eight to ten inches long, and as thick in proportion, which so astonished me that I immediately ordered a number of plants to be sent to Ladó. This fruit, although of a very solid consistence, has a very agreeable taste, and is eaten dried by the big chiefs. You have also tasted such dried bananas (*badingo*), and said that you liked them; you will therefore accept those I send you as a reminder of Monbuttu. Should you require more, please say so. The banana groves, which are here also left almost entirely to themselves, remind me forcibly of Unyóro and Ugánda; but what an immense difference there is between those countries and Monbuttu!

The reason for this difference may be found, first, in the country itself. Ugánda lies at a much higher altitude than Monbuttu, where two careful hypsometrical observations gave an altitude for Bellima of only about 2500 feet, which, when carefully calculated, will be probably considerably increased. On this account, also, the flora in Ugánda cannot compete with that in Monbuttu; and although the same "gallery" formation may be found there bordering the deepest watercourses, it never, as far as I know, attains in that country the overwhelming luxuriance which is seen here, and any single species, whether tree or bush, never reaches such gigantic dimensions there as here. The best proof I can give of this thorough difference is the absence of palms in Ugánda, where, with the exception of the *Phœnix spinosa*, a few dolébs, and a species of Calamus, no further examples of this family are

to be found. The doléb palm appears to be also very rare in Monbuttu, but it is said to be common in the plains of the Meaje and Mabode tribes.

TINGAZI, *July* 8, 1883.

If I were to describe to you the road which led me from Bellima to this place, I should tire you just as much as it tired me. Probably with the idea of preventing me seeing his villages, Gambari chose a road which led through the virgin forest, and which at last confused his own guides, so that I was very glad when we hit upon a few Momvú huts in the middle of the forest, and when some of their occupants led us to our small station of Maigo. On our first day's march we forded the Gadda, which flows not far from Bellima; we then met with a number of its tributaries, often larger than the river itself; fortunately, the water in them was not very high, and, here and there, we found bridges constructed with the boldness of conception well known to you. So all went off well, and my experience is the richer, for I had only seen true virgin forests before in Ugánda.

When we were about an hour's march from Tingazi, we came to the village of Nenja, which is situated on a high hill, and is the residence of Yangara, who received us in a circle of his wives and people. He expressed a wish for us to remain, but we were obliged to decline the invitation, and to continue our journey to the station, where we made, unfortunately, a very short stay, as we had to start on our return journey the very next day. To me the time passed like a dream; almost too much of it was taken up by visitors from all directions. Let me call to mind the most interesting of them. From the west came the Zandē chiefs, Bori, son of Manji, and grandson of Ntikkima-Kifa, who had never entered one of our stations before; Mbrú, a very aged, jovial fellow, with long white hair and a beard dyed red; Masonze, a special friend and host of Dr. Junker; Mbittima, Wando's eldest son, who has made himself a home among the Abisanga, and in whose favour it may be said that he is totally unlike his father. Bakangaï had died a natural death a few days before, and his son, who is under Kanna's immediate protection, seems likely to succeed

him. I have sent men with presents to Kanna, for I am very desirous of establishing friendly relations with him. Hitherto he has always kept very much aloof; but the experience this part of the country had of the Danagla, who professed to be officials, was scarcely calculated to inspire him with a desire for annexation, or even with confidence. This has now been remedied, I hope; I have acted honestly, and the new organisation of the country may be more in accordance with its needs and wishes, especially as it was drawn up after consultation with the most influential chiefs—which brings me back to these men.

The three great chiefs, Yangara, Gambari, and Kadabó, now rule the north of this country from west to east. The two latter are parvenus, but Yangara is a true Monbuttu prince, though sprung from a collateral branch. Kadabó does not rule in Monbuttu proper, but in Momvú, in the far east, and therefore may be able to maintain his position with our assistance. How long Gambari will be able to do so is very problematical, considering his ceaseless intrigues and plots. It is his intention to collect all the arms he can get hold of, and then to occupy the Mabode district, where his favourite brother, Arama, is said to have established a dominion already. I will watch these proceedings for some time longer, and then, if there is no improvement, I will request that the rifles be given up, and will look out for another chief who is legitimate, and at the same time more sensible than Gambari. Yangara, on the other hand, was an excellent companion during my stay at Tingazi. He is somewhat timid, perhaps more so than is desirable in a man of his position, but he is honourable and prudent, and has hitherto proved a trustworthy ally. When Ghattas's people killed Munza, they of course divided his wives between them, and in some way or other it came to pass that Munza's youngest and favourite wife, Kettivoto (called by the Arabs, Tam Séïna), is now Yangara's chief wife and adviser, and seems to deserve the influence she enjoys, for she exhibits much common sense whenever she takes part in consultations. She is not pretty, is no longer young, nor has she ever had any children—which is remarkable in a Monbuttu woman—and yet her superiority is recognised, not only in Tingazi, but

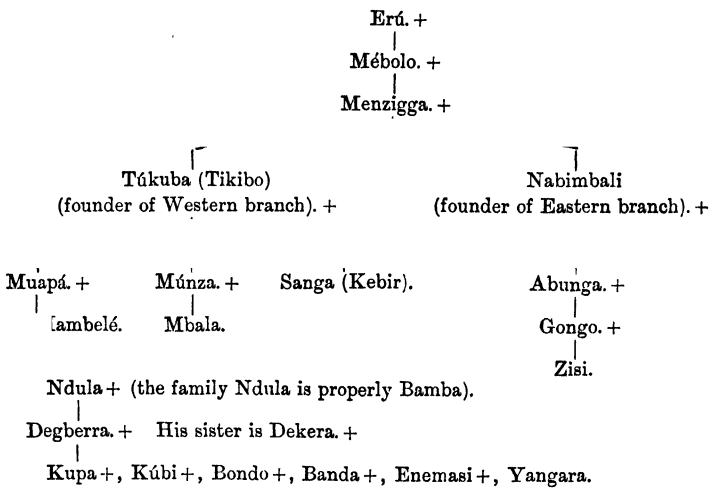
also throughout the country. You know, of course, what an important position women occupy as a rule in Monbuttu. Munza's daughter is married to Gambari. She is a very aristocratic and conceited person, and tries to hide her twin sons' mixed blood by bandaging their heads all the tighter. It is very noteworthy how much importance is attached to pure descent in Monbuttu, and indeed among the Zandē also, of course only on the father's side. Munza's sons, of whom there are about fifteen living, are dispersed among the chiefs. The three elder, Mbala, Bomba, and Bebe, have founded a village on the Nomayo, where, according to the general rumours, they perform wonders in cannibalism, and wait for the restitution of their paternal inheritance. I was by no means favourably impressed by Mbala.

Munza's brother, Asanga (Sanga), is certainly pre-eminent among the Monbuttu chiefs of the present day. He hastened to Tingazi from his residence, which lies two or three days' journey to the south-south-west. We were unknown to each other when I caused him to be released from his long and unmerited captivity, and sent him back to his country, and now he came to make my acquaintance. He quite corresponds with one's conception of what a Negro prince should be. He was accompanied by a crowd of men, among whom was an Albino with a long fair beard, and he brought with him about twenty very elegantly painted ladies. It was long since I had had the pleasure of seeing so elegant and fair a company as the one which now came to visit me, and which was reinforced by Yangara and some forty of his wives. From the multitude of chignons, I might have fancied myself at an æsthetic kettledrum, had it not been for the apologies for aprons, which reminded me too forcibly of Africa. After I had presented my amiable visitors with a few glass beads and copper bangles, I brought out your book in honour of the occasion, and you would have felt well repaid for your trouble could you have seen the transports of delight caused by your pictures, especially the Zandē and Monbuttu portraits. I can assure you that the "*Mbarik Pah*" * is very warmly

* That is, "leaf-eater," a nickname given to Dr. Schweinfurth in allusion to his botanical occupations.

remembered, particularly by the Zandē, and that, when I inquire after the names of plants or am collecting seeds, I am very often asked if I am your fellow-countryman. It is beyond the comprehension of people here, as well as in other parts of the country, how a man can trouble himself more about animals and plants than about slave-girls, and can show greater interest in mountains and rivers, valleys and plains, than in making raids on the Negroes' cows and goats. And the people are certainly not to be blamed, for who has taken trouble about these things from disinterested motives until now?

I have tried to draw up a genealogical tree with the view of acquiring a knowledge of the real ruling families, and of distinguishing the numerous claimants and upstarts from the rightful masters of the country, and now I have a fairly clear idea of this subject, so puzzling to a novice. I append the curious result of my researches :—



N.B.—Degberra's sister, Dekera, married Nabimbali, chief of the Monbuttu, who associated with himself his brother-in law, Degberra, and invested him with a part of his territory at the expense of his son, Abunga. From him Yangara is descended.

I should certainly like to have extended my journey a little farther to the west, where every step would have brought me nearer to Junker's farthest point, or to the south, whence I re-

ceived a pressing invitation from Sanga. But there was so much business to be transacted in the east that I could not even think of staying in Tingazi any longer. My zoological collections were increased daily by new and unknown specimens, and I received many interesting objects, as well as much valuable information, through the kindness of the chiefs. My vocabulary of the Monbuttu language was making rapid progress; I therefore left with the greater regret, after a stay of barely eight days. The official business was despatched to the satisfaction of all concerned, and I venture to hope that Monbuttu will enjoy henceforth a well-regulated and orderly administration.

I distributed among the chiefs a large quantity of seeds which I had brought with me from Ladó and Makraká, as well as some loads of white durrah from Makraká, which we wish to try here. Only eleusine has been cultivated here up to the present, and that too in very insignificant quantities. Bananas, sweet potatoes, Colocasia, manioc, yams, Helmia, and gourds are found everywhere, and suffice to support life. Maize of good quality is rather to be considered a delicacy. The tobacco, which our officers have begun to cultivate from Gadaref seeds, is excellent. Wheat and rice are to be tried this year, and lemons, pomegranates, and figs promise to be a success. I sent vine stocks and guavas from Ladó. This is all very good so far, but the want of butcher's meat is much felt in the long run, though perhaps we should call the microscopical fowls meat out of politeness. I hope I may be able to arrange for the transport of large numbers of animals, especially goats, from Lógo (your Maoggu, and probably Baker's Malegga), not for consumption, but for breeding purposes, in order that they may gradually spread over the country.

BONGERÉ'S VILLAGE, NEAR THE DONGU, *July* 22, 1883.

It had been my intention to go due east from Gambari's residence to the stations in Kadabó's territory, and thence to reach our station, Lógo, where the main body of my men was waiting for me. But it was not to be. The return journey from Tingazi was rendered so much more difficult by continuous rains that we had to construct bridges over most of the larger

streams—and there were only too many of these—before we could cross them. You would have been delighted to see the Governor of the province working in the deep water, axe in hand. The Monbuttu are poor hunters, and swimmers are very rarely found among them.

Shortly before reaching Bellima, I received letters which upset all my plans and obliged me to make a forced march northwards to this place instead of going eastwards. The Dinka had surprised Rumbēk during profound peace, put all the garrison and inhabitants to sword, and carried off weapons, ammunition, stores, &c. I am quite at a loss to understand how this happened, and how the people could have acted thus without any incentive—but that is just it! What can the incentive have been? I had sent off sufficient reinforcements to Ayák and Rumbēk since the Dinka on the Bahr-el-Ghazal had become refractory, so that I have nothing to reproach myself with. However, I at once forwarded a detachment to march from Gambari's past Gango to Lógo, and bring the men assembled there to Makraká. I resolved to make for Makraká myself by the shortest way, to send forward reinforcements from there, and, when the greater part of the men from Lógo had arrived, to go north with them.

We followed the old road from Gambari's residence to Mbaga's village, Negunda, and then, after a good march of about seven hours, reached the Kibali, which we crossed immediately. The Dongu flows into it just at this place, and a hypsometrical observation gave the height as 2171 feet, which agrees pretty well with the altitudes obtained of the stations Mundú and Dongu, and of this village (Bongerē's). Immediately after leaving the river, we entered the boundless steppe; there were tall, sharp grasses, marshy pools, genuine papyrus swamps, and very scanty woods. We wandered for two whole days in this chaos of grass, making a road for ourselves, for there was no path most of the way, and you know what that work is. The guides we had taken with us proved incompetent from the first, and so we had only the compass to depend on. We passed some Zandē dwellings, standing by brooks amidst the woods which line both banks, but they were deserted, so that we could gain no information about the way.

At last I ordered a halt, and went forward myself in quest of huts and guides, when, as luck would have it, I came upon some dwellings, the occupants of which, being subjects of Ikwa (Wando's son, and a friend of mine), gave me a guide, who conducted us to Bongerē's village, where we arrived towards three o'clock in the morning.

I shall go on again to-morrow morning, if the few porters I have asked for arrive. We are now in the middle of the Zandē country, a "gallery" wood still reminding us occasionally that we are yet far to the south. Hunting being the chief occupation of the people, their dwellings are scattered singly over the country, and enormous tracts of land are purposely left uncultivated, partly as a protection against the attacks of enemies, but still more as refuges for all kinds of game, for the Zandē like meat above all things, and human flesh, though it is preferred, cannot always be easily obtained.

The Dongu lies about an hour's journey to the south of this place, and has flooded the country far and wide; in the dry season, it can easily be forded even here. I believe I have now determined its lower course almost completely, having seen it at four different points. Its abundance of water may easily be accounted for by its draining the numberless swamps and marshy hollows which intersect the country between here and the highlands of Makraká, and contain an ample supply of water all the year round. It is still an undecided question whence the Dongu comes, but most probably it descends from the mountains round Janda and Korobé. If I return from the north with a whole skin, one of my first tasks shall be to visit the western slopes of the Kaliká mountains, and then to hunt up the source of the Kibali more to the south. All our maps are incorrect, and I am inclined to believe that the position of Monbuttu must be slightly altered. Dr. Junker is the most competent authority on this point, and I will not forestall him.

Junker was still in the west when I last heard from Lupton Bey, though he intended to go shortly to Dem Soliman on his way home. But, as Lupton told me in the same letter that the road to Meshra-er-Rēk was blocked by the Dinka, and could be traversed only with an escort of a couple of hundred

men, I have written to Junker inviting him to come to us through Monbuttu, for his own sake and that of his collections, as Herr Bohndorff is still staying somewhere near Zemio's. At the same time I sent the necessary orders to all our stations to give him assistance and supply him with porters. If he likes to take this opportunity of surveying the upper course of the Kibali on the way, there is nothing to prevent him; he has only to proceed along the road which it was originally my intention to have followed. I handed the letter for him to the son of the Zandē chief, Mbru, together with a letter to Bohndorff, and I am convinced that the latter gentleman has received them by this time. So I shall hope to see Dr. Junker again before his departure.

TOMAYÁ, *August* 10, 1883.

I have had some hard marches, and well earned the few days' rest that have fallen to my share. Bongerē was kind enough to procure me quickly the porters I wanted, and in two long days' march we reached the village of Bodio, another Zandē chief, where we were to change our porters. But this chief did not show himself, and sent a downright refusal in answer to my invitation. I had no men with me except my servants, so it was best to keep quiet, and employ the porters, whom I had detained in expectation of what might occur, for one day more. I settled my men, and stored my small quantity of baggage in the village of a friendly Zandē interpreter, dismissed the porters, and hurried forward to requisition others among the Abaká chiefs. I was so successful that I had all my men and goods with me again within three days, and then we went on towards our station, Tomayá, in rather short marches, for the tall grass was very troublesome. We reached this place the day before yesterday, and on the way I was able to get a small supply of durrah from Chief Tomayá, who has settled about three hours' journey from here; I had not tasted any for a long time, and it was quite a godsend after my long abstinence in the land of the root-eaters.

I must now wait until the men arrive from Lógo, which may not be for a couple of days more, and I am trying to turn the little free time that is left me to the best account. It is very

interesting to find forms so far to the north which I have hitherto only seen in Monbuttu; the wooded margins of the brooks especially remind me of that country.

The comet year is not yet over. I hear from Ladó that diluvial rains are continuing day and night without intermission, and in the south it must be still worse, if possible, for the Bahr-el-Jebel has overflowed its banks and flooded Ladó, just as in 1879, when the obstructions in the river cut us off from the world for nearly two years. God save us from a repetition of such misery!

The old *zeríba*, Sherifi, now Gōk-el-Hassan, has been burnt down, with all its inhabitants, and Hassan himself is slain. The Dinka seem to be in downright earnest this time. All the people from Sabi and Kanna have fled to our territory, and though I am glad of the addition to our strength, it is an unwelcome proof that the conflagration continues to spread. Our frontier districts are also disturbed, but we have at present no further misfortune to complain of.

A letter from Lupton Bey reached me just in the nick of time, before the way was closed, for all our communications with the Bahr-el-Ghazal are now interrupted, and may remain so for some time. He has sent me a new map of the territory under his command, based upon a large number of observations he has taken to determine the position of certain points, or, at any rate, their latitude. I am sending the original to Dr. Behm for publication, but I will take a copy for you as soon as I have time, and will enclose it in this letter. The names in their English form will no doubt puzzle you as much as myself. I have only been able to recognise a few of them in their new dress, though for years I have been familiar with names of places in this country. The hydrographical data, however, on this map are exceedingly interesting, and in many cases at variance with the views entertained at present. Lupton tells me that he has seen with his own eyes almost all that he has drawn, and I am really glad that he has been working so industriously. With the addition of your labours, and those of Junker and Casati, we might at last attain that great desideratum, a good map of Egypt's Equatorial territory. In Government circles no interest seems to be taken in it, nor

is the need of it felt, and so the matter is left to private enterprise. I would set to work at the task myself were I more than a dilettante in geography.

But do not therefore suppose that I am idle. On the contrary I have, alas! scarcely time enough for my most pressing private work, and hence it happens that my preparatory work for an ethnographical map of our territory has by no means come to an end at present, though I have been engaged on it for a long time. I am looking forward very eagerly to a comparison of the Monbuttu vocabulary with other north-western languages. The oldest people of the country, and those best acquainted with their history, as far as this word is appropriate here, told me that their forefathers came from the north-west, and, after passing a large lake (without any outlet!), reached the Kibali, which they gradually crossed to occupy their present country. Without venturing on further conjectures, I may suggest that an attempt to search out points of resemblance in languages farther to the north might perhaps be successful. For instance, it would be very interesting to compare the proper language of Darfur. A very complete vocabulary of it was compiled at the time of Purdy and Prout's expeditions, as I have heard from some of the men who accompanied them, but what has become of it I cannot say.

This is a high day for me. I have received letters from Lupton Bey and Dr. Junker, the one written from Dombo on June 2d, the other from "my *zeriba* near Zemio, seven days' march south-west of (Schweinfurth's) Dem Guju." "I can look back to my last journey in the west with satisfaction, and the more so that I have returned in comparatively good health after my many exertions. The regions I have traversed are more extensive than I supposed. They are nominally under Egyptian rule, and yield constant supplies of ivory. I have made a circular tour of four and a half months' duration, travelling from here south-westwards to the Welle in fifteen days, which I reached at a point about four to five days' march west of its confluence with the Bomokandi. The latter river, with which you must be acquainted (it is the Nomayo), runs up from the south-east, and Bakangai's and Kanna's territories skirt its southern banks. A-Babua dwell near, on the southern

shore of the Welle, besides some isolated descendants of the A-Zandē princes. I turned my steps thence towards the north-west, and came upon the Welle again at the end of ten days. The whole district up to this point is inhabited by Banjia, who are akin to the A-Zandē. A great number of strange tribes people the farther bank of the Welle and its labyrinthine archipelago. Later on I crossed the Mbomu farther to the north; it is an important tributary of the Welle, which, rising in the eastern A-Zandē domain, near my route from Dem Bekir to Ndoruma, flows southwards, and enters the Welle still farther to the west than I penetrated. I made a circuit to the north through the territory of numerous tribes which are now broken up, and reached my headquarters again at this place."

This is the most important part of Dr. Junker's letter, and as he declares that his journey is ended, and that he is only waiting for "a favourable opportunity to return home," he will, I hope, give you in person an account of his toils and struggles, his work and labour. I have written again both to him and to Lupton, and, considering the difficulties in the Bahr-el-Ghazal, where Lupton has to put forth all his energy to protect himself and his province, I have invited Junker to come to us, where greater quietness prevails (may it continue!), and where his departure will depend only on the arrival of the steamer. I hope he will consider my proposal, and act accordingly. I cannot conceive what the views of the people at Khartúm are concerning these districts, whether they imagine that our handful of men are a sufficient protection in themselves, and that all the Negroes together are no match for us. Lupton has been expecting a steamer for the last nine months. I had myself to wait eight months, and then after all I did not get the very things I wanted. Well, we will do our duty, and if circumstances become still more complicated and we are worsted, the Government will only have itself to blame.

Lupton Bey has sent me a great many very interesting notes about his southern territory, but I refrain from discussing them, as I am going to send them to Dr. Behm with the map. Lupton defends the connexion of the Welle with the Congo most warmly, which, however, seems no longer possible after

Junker's disclosures quoted above. To judge from information I have received from some of our men who came from the south, it seems that Junker's Kibi must be considered as only a tributary of the true Kibali, and that the latter river comes from the south-east; probably, therefore, from the mountains on the western shore of the Albert Lake. From the north-east it receives the waters of two other important tributaries besides the Dongu and Kibi. I send you this as an *on dit*, with all reserve, and put off its verification to a future occasion.

The Lógo tribes, whose language is allied to that of the Mádi, are still somewhat troublesome, for my stations there are of recent origin, but there is nothing to prevent journeys being made among them. Travelling in this country is by no means so difficult in any respect as is usually supposed. Of course hardships are not absent, and one often gets wet, but that is very pleasant in hot weather. I have long wondered that no sportsmen have yet strayed this way, for we could show them all kinds of animals. But they would have to bring provisions with them, for Europeans generally turn up their noses at our durrah pancake (*kisra*), though it is very good, when one has learned to appreciate it, and particularly when one has not had any for some time.

LADÓ, *October* 19, 1883.

Here we are again in our old headquarters, but in what a state! I have been very ill lately, and I scarcely expected to recover; it appears, however, that my mission here is not yet at an end, so I will set my shoulder to the wheel again. My men are still in the Dinka district, where no further disturbances have yet occurred, and so, I hope, order will be re-established in a very short time without unnecessary bloodshed. The rest of the province is quite quiet, thank God! and it is being worked so steadily that I reckon on a disposable surplus of about £12,000 sterling at the end of the year. Of course the steamer has not yet come, though I urgently requested that it might be sent at the end of August. All our stores are of course quite exhausted, and we are vegetating, so to speak, from day to day, and hoping for better

times. Will they ever come? The worst mishap, and the one that has vexed me most, is the entire destruction of our gardens by the river floods. My bamboo plantations, so carefully tended, and the lovely roses, are gone, while even the rice has been drowned. I have seeds of the latter, but what of the others? Only the guavas have benefited by the rain, and they are now covered with fruit, which, however, no one eats here, because of their aroma. The Elaïs seeds have not yet sprouted. Cabbages, grown from French seed, have done very well, and so have the carrots, though they are not sweet. The vines are in good condition, but have no fruit yet. Peaches, plums, and olives will hardly be able to bear fruit on account of the great heat, although they are beautifully green; I will transplant them to Makraká, where it is cooler (Janda, 3300 feet).

November 29, 1883.

It is rather a long time since I last worked at my notes for you. I waited from day to day, hoping that a steamer would come at last and bring me news from you, but we seem to be forgotten in Khartúm or consigned to perdition. On November 23 I was delighted at receiving a letter from Lupton Bey, who had not written for a long time, and who now informed me that a steamer had arrived in the Meshra, but had not been heard of till a month afterwards, on the 11th of *Shewal* (August 15), for the road between the Meshra and Jur Ghattas was blocked by the Dinka, and could only be used with an escort of several hundred armed men. According to a note Lupton had received—the despatches were still on board the steamer on October 14, and Lupton himself was at Jur Ghattas—the Governor-General in Khartúm has been changed once more, and Giegler Pasha has gone on leave.

A European traveller had come to the Meshra, and as he would try to force his way to Jur Ghattas in spite of all the warnings of the people, he was killed by the Dinka, one and a half day's march from the Meshra, the victim of his own obstinacy. The unfortunate man may have been your friend Schuver.*

* It was Schuver.—R. W. F.

Things are going on very badly in the Bahr-el-Ghazal province; almost the entire northern half of the country is in open rebellion, and Lupton Bey has lost his best men in the repeated fights. He had never very many of them, but the worst part of it is, that the Danagla are in close communication with the Mahdi's people in Kordofan. I quote the following words from Lupton (from Ganda, August 20, 1883):—"The Arabs are, I am told, in company with Gallabas, determined to attack us at Dem Sebayr (Dem Zibēr) as soon as Hareef is over. Slaves are bought and sold now for ammunition; three packets will buy a boy, five a girl, two girls a Remington." This gives a better idea of our circumstances than any description.

But it is not in the Bahr-el-Ghazal alone that the Negroes are disaffected; things begin to look lively with us also. You know, from Baker's book, about Chief Loron (Baker's Alloron) and his intrigues against the Government. Since the management of this province was given into my hands, I have endeavoured to make friends with this chief, and until now we have been on the best of terms. Nevertheless, he is again the guiding spirit of all the intrigues here, and only a few days ago he invited the chiefs of Belinian and Lokoya to make a combined attack on Ladó, as there were but few soldiers, and no ammunition there, which, alas, is only too true. We have held out so far, but it is very doubtful if we could resist a combined attack of all the Bari. The greater part of my men are in the Dinka district; the rest are scattered over a country which extends from 8° to 2° N. lat. Assistance from Khartúm—well, you see well enough what that means. Old Mohammed Said Pasha and his men have been starved out, and have had to surrender to the Mahdi, because they were not supported from Khartúm. It is doubtful whether Slatin is still alive. Lupton is almost deserted, and I have no arms and supplies.

I have had no news of Dr. Junker for a long time. Lupton informs me that transport of baggage to the Meshra is not to be thought of. I do not know what Junker will do now. Had he come here he might have gone to the south if necessary, for Kabréga would have sent him forward on my recommenda-

tion. Casati is in Monbuttu, and is getting ready for a tour to the south-east.

My collections increase very slowly, for there is nothing to collect in Ladó but mosquitos and bats. However, my herbarium begins to assume more respectable proportions, and I shall soon get together a small collection if I go once more on my travels. These are certainly castles in the air at present. I have a most delightful piece of news to tell you—at least I consider it such—namely, that the first female date-palm in this province is now bearing fruits as large as a bean. I will send them to you if they ripen.

You will receive another curiosity in the shape of a black powder, which the Monbuttu extol as an aphrodisiac. Our people here swear to its efficacy, and so I enclose directions for its use. Only persons presumably sterile, whether men or women, ought to take it. The powder is composed of the ashes of two roots, one of which looks and smells just like a radish. I was, unfortunately, not able to obtain whole tubers, but I have written for some. Bruised leaves of a liliaceous plant, which the Monbuttu and Zandē grow for the purpose beside their huts, are added to beverages. I have brought four bulbs of it with me, and have planted them for the present to keep them from spoiling. If they blossom, I will send you a whole plant; if not, I will send the bulb in clay.

A quantity of sweet-smelling resin from the *mpafu*-tree, of which I have already sent seeds, will do for analysis. In Unyóro, I heard the Amaranthus praised as a good remedy for worms, and therefore I brought seeds of it with me; it grows wild everywhere, and is eaten like spinach. Its efficacy has been confirmed by trials in the hospital here; perhaps something might also be done with it in Europe. The leaves of the Papaw are excellent for inflammatory swellings, as well as for swellings of the glands and for bubos. I prefer it to all the other remedies I know. There is much to learn here in this direction. But how is it that the Papaw, which is looked upon as the type of dicotyledonous trees with an unramified trunk, often forms branches here which also bear fruit like the main stem itself? I am impatiently waiting for the mango seeds to try and cultivate them.

Marquet in Khartúm has promised me some pineapples, and I believe they will succeed splendidly here.

December 11, 1883.

A high day!—a letter from Junker! Two boxes of presents for me accompany it: medicines, nets, cases, glasses, books, and, best of all, a small quantity of blotting-paper, which I can use for drying plants. He tells me that all the paper and portfolios you gave him were burnt last year in the fire. What a pity! Presents coming to one in the interior of Africa from the western A-Zandē districts through Monbuttu are rather mysterious, and in this case they only serve to gild the pill: Junker is not coming, but is going to Khartúm by the Meshra, and takes leave of me in this letter. May it be his lot to reach home safely, and meet with the appreciation he so richly deserves! He is a fine, warm-hearted fellow. It sounds very curious for him to ask me to mention in my letters to Europe that he is well, and is thinking of returning. What must his views be of the gracious treatment we experience at the hands of our Government in Khartúm—they almost spoil us, steamers are sent so often! The steamer left here on April 14, and this is the 11th of December! In itself it is a matter of indifference to me whether I have any communication with Khartúm or not, for I learnt long ago to cut my coat according to my cloth. I scarcely ever drink spirituous liquors, and I can get coffee, which I cannot do without, from the south. What vexes me so much is the waste of time. Here I am, loitering in Ladó, where there is nothing to do and nothing to collect, worrying myself in the company of my clerks, and waiting for the steamer, when I might be working and collecting in the south or east.

December 18, 1883.

By the post before last Casati sent me a closed letter for you [it has not reached its destination], asking me at the same time to read the contents. As I replied that the letter was fastened when it arrived, he sent me a copy yesterday. It contains some very sensible opinions, but also, to my regret,

a panegyric on myself. I should be sorry that you, above all, should suspect that such demonstrations "to make my merits known to the world" are due to my instigation. I must, therefore, earnestly beg you to leave out the passage, should you wish to publish the despatch. Excuse its insertion. I have now served nearly nine years on the equator, and during this time I have never resorted to puffs—though they seem to be necessary in Egypt if a man wishes to get on.

I have some fine specimens for you from Unyóro and Ugánda, and I will do my utmost to obtain others. As my presence is urgently demanded in the south, I shall probably make an excursion to the lake after the arrival of the steamer, and shall then have an opportunity of purchasing some ethnographical specimens.

January 1, 1884.

A happy New Year to you! Will you sometimes think of me during this year, and send me a line occasionally? I really need it, so look on it as charity. You have surely lived long enough in Africa to have learnt the value of a few kind words or a sympathising letter.

January 8, 1884.

Here is a great surprise; he is coming after all—Junker, I mean. According to a letter from him, dated November 16, which I received to-day through Monbuttu, he had started off from Zemio's on that very day, intending to reach the main north road, which terminates at Ansea's (Makraká), straight through Ndóruma's and Mbio's territories, or, if this were impossible, by a détour to the south through Binza's and Wando's districts. His letters from Europe had reached him on November 15, and though he had made a day's march northwards, he was induced by news he received from Lupton Bey to turn back and direct his steps hither. So I hope to have the opportunity of welcoming him here about the middle of this month, and you can well imagine what a pleasure it will be.

January 23, 1884.

This morning our friend Junker arrived here safely and in good health. God grant that a steamboat may come shortly

to enable him to travel home! What a long talk we shall have now!

May 27, 1884.

The Bahr-el-Ghazal *mudirië* has surrendered to the army of the Mahdi, after Lupton had been deserted by all his men. Sheik Keremallah, commander-in-chief of the army of occupation, writes to me that the whole Sudān is lost, Khartúm besieged, and that Hicks and Alaëddin have fallen, with 36,000 men, and he invites me to come to him at once and surrender. It would be folly to fight without rifles, without ammunition, without men that I can depend on, with Danagla before and behind me. I shall therefore go to the Bahr-el-Ghazal on Monday.

Junker has decided to try the route to Zanzibar through Mtésa's residence. God guide him!

I am sending this letter by him. Kindly keep a place for me in your thoughts.—Yours very sincerely,

DR. EMIN-BEY.

II.

LUPTON'S LAST LETTERS—EMBASSY TO KEREMALLAH—WILD REPORTS—ACTS OF TREACHERY—EVACUATION OF THE OUTPOSTS BEGINS—NO ESCAPE!—THE EXPOSED STATIONS BŌR AND RUMBĒK DESERTED—RETREAT TO AMADI—KEREMALLAH'S INCENDIARY LETTERS—BATTLES ROUND AMADI—EARTHQUAKES—LOSS AT BŌR.

LADÓ, *August* 14, 1884.

I FINISHED my letter to you very hastily under the influence of the sad impression which the surrender of Lupton Bey and his *mudirië* to the Mahdi's men made upon us all. We were hourly expecting our turn to come next, and to see the Kordofan hordes encamped before our gates. It is but right that I should now inform you of what has occurred since, though I do not know how my letter is to reach you, if it does at all, for we seem deserted and forgotten by all the world. I must,

however, in the interests of my people and of Junker, not despair of a favourable solution to all these complications in the end. I believe I told you about Lupton Bey's last letters, in one of which he announced that the Mahdi's men, several thousands in number, were encamped six hours' march to the west of him, and that he was resolved to fight and die. Another followed directly after with the news that, being left in the lurch by all his men, he had surrendered his province, and was going to Kordofan—he hoped also to see me shortly. Together with this letter I received a despatch from the "Emir Keremallah," commander of the army of the Mahdi on the Bahr-el-Ghazal, summoning me peremptorily to join him at once in Assuan with my men, and submit to the Mahdi. The whole of the Sudān had done so, Khartúm was besieged, General Hicks and his troops, Alaëddin Pasha, and all the higher officials were slain, and, if I delayed, all my communications both by land and water would be cut off, so I had better make haste.

Now just think of my position. For fourteen months I had had no communication with Khartúm, or news from there, the magazines were quite empty of cloths, soap, coffee, &c., and though I had repeatedly pressed by letter for a consignment of a couple of hundred Remington rifles and a sufficient supply of ammunition, I had not received them; the whole of Makraká, Rōl, and part of Monbuttu were full of armed Danagla; in Ladó itself there was a rabble of drunkards and gamblers, most of them fellow-countrymen of the rebels—the clerks of my divan. The prospect was not brilliant. My soldiers, of little account under any circumstances, were scattered over a wide extent of territory, and their withdrawal had to be accomplished with the greatest circumspection.

Accordingly, I asked my officials here, in open council, whether they considered it more desirable to submit or to prepare to fight. There could be no doubt what the answer would be—the purport of it was submission. A letter in that sense was therefore drawn up, and then we consulted as to who should deliver it. The choice fell on myself, the *Kadi*, the schoolmaster, and a few other men of this place, among them one of my clerks, whose family possesses great influence

among the Danagla. Now, I knew very well that my removal would leave the way clear for anarchy, and that a descent of the Makraká Danagla on Ladó would plunge the whole province into ruin. On the other hand, it was imprudent to reject the mission assigned to me, though it was evident beforehand that I should never return if I once went to the Bahr-el-Ghazal, but should have to go to Kordofan like Lupton. Amidst all these perplexities, which were aggravated by scarcity of corn, a fire broke out on June 1, dangerously near the magazine, and in a very short time destroyed a large group of houses and huts chiefly inhabited by Coptic clerks. Whereas previously every one lent a hand on such occasions, fanaticism now showed its worst side. I had to have recourse to the soldiers to get the fire put out, and when I asked a Mohammedan clerk why he did not help us, he answered, "They are Christians there; let them be." In face of such symptoms I bestirred myself, and in another assembly I laid the state of affairs before the people, proving to them that my absence could only be productive of mischief, and proposing that the *Kadi* should be named chief of the mission in my place. This man, strange to say, supported me, and so the deputation was sent off. Its instructions were as follows: the *status quo* was to be maintained in the province until steamers and boats could be sent to carry us to Khartúm; the province was to be exempt from invasion under any form; above all, no violence was to be permitted against the Sudānese soldiers. This clause was inserted in consequence of the arrival of certain letters, which threw a light of their own on the situation. They came at the same time as a letter from Keremallah to Dr. Junker, inviting him to repair immediately to Wau and take charge of his collections left there by Bohndorff, if he did not wish them to be given up to the Negroes. There were letters from Keremallah to various officials (Danagla); they were copies of the one sent to me, but being directed to them, were manifestly invitations to disregard the constituted authority and desert with their men; then there was a letter in English from Lupton Bey to Junker, containing the information that Fashoda had been given up by the Government; and, lastly, an official letter from the commander of my station in Ayák. He wrote that

three brave Sudānese soldiers had fled to that place, and had even brought their rifles with them, one of them being Vonni, Lupton's late orderly, a trustworthy man, who properly belongs to this province, but had followed Lupton to the Bahr-el-Ghazal. Well, these soldiers related at an official audience, that Lupton had been betrayed by his own men, who had been in league with the rebels for a long time; that the Danagla, directly after they had occupied the *mudirië*, had burnt all the books and Government documents, had opened and plundered the magazine, had seized all the arms and ammunition which they found in store or in the hands of the soldiers, and sold them to the highest bidder for money or slaves, and finally had put the soldiers in slave-chains. The latter had their scanty food thrown down before them into a trough scraped out in the ground, and within the next few days were either reclaimed by some of the Danagla as their former slaves or were publicly sold. You may imagine how I congratulated myself on my decision not to go to the Bahr-el-Ghazal.

Immediately after the departure of the above-mentioned mission, Dr. Junker went towards the south, but remained in Dufilé, to await for a time the course of events. He was kind enough to take all my correspondence, intending to carry it with him, if necessary, by way of Zanzibar. I hope it may not come to that, but that he may yet take the route to the north. As I was making arrangements to send all the people, who are not wanted here, the so-called divan and its clerks, to Makraká, where, at any rate, there is abundance of corn, another event suddenly took place there which filled me not only with surprise but grief.

The head of the administration there, a certain Ibrahim Aga, of Khartúm, who had hitherto always proved trustworthy, and therefore had been promoted by me step by step, though he was a Dongolaui, had, it appears, been engaged for some time in collecting the Danagla together from all the outlying points, while at the very time he was writing letters to me full of expressions of devotion and assurances of his undeviating faithfulness to the Government. He had pillaged the magazine in Wandi, and, through the agency of an Egyptian officer who was devoted to him, he invited the few Sudānese soldiers

and officers in the place to break their allegiance, but met with a refusal. After this, on June 4, he started off, together with some Danagla who had joined him, the above-mentioned officer, and five Egyptian soldiers (ex-convicts). The boat on the swollen Yeï had first been sunk by his orders, to prevent the news reaching here. They plundered the country all the way through Makraká-Sugaïre to Kabayendi, carrying off all the natives they could lay hands on, both men and women, and when they reached the station of Kabayendi, they pillaged not only the Government magazine, but also private property. The commander of the station, a certain Mustapha Aga, also from Khartúm, was put in chains and carried off, all his property being confiscated. Then the rabble went to Kudurma, where they took up their quarters in order to prepare flour for the march to the Bahr-el-Ghazal, that is, to steal corn from the natives, and make flour from part of it and *mrissa* from the rest. During this halt, the Danagla stationed in Mundú joined the rebels, with their arms and ammunition, and there were only a few men left in Makraká who adhered to us. But in the meantime I had been able to throw a few soldiers at least into the district, and as it was not at all my intention to give up acting on the defensive, I confined myself for the time being to stirring up the Negroes against these men, and so far succeeded that all the people they had dragged off with them returned to their homes. But dissensions seem to have broken out in the Danagla's camp itself, arising at first on account of the captive, Mustapha Aga. Letters and news received from deserters informed me that Ibrahim Aga was forced to restore all that he had taken from Mustapha, and was at last even imprisoned; but in the end he took the road to Sabi, accompanied by the five Egyptian soldiers and some of the Danagla, while the remaining Danagla and the Egyptian officer already referred to are still staying in Kudurma. They intend to wait there until the *kharīf* is over, and then to proceed to the north. Of course, they are in close communication with the Danagla who have remained ostensibly true to me, and I should not be astonished if our present allies joined their seditious brethren at the expiration of the *kharīf*, unless help or good news comes from the north.

There are always rumours abroad in excited and turbulent times; we hear tales and reports of occurrences in Kordofan and on the Bahr-el-Ghazal, though no one can tell how they have arisen. Letters from Keremallah to his countrymen informed us that Lupton had actually left, and that he (Keremallah) intended to go to Kordofan also, but there was no other news. We were therefore the more surprised when, soon after, a rumour was circulated here that Gordon Pasha had entered Khartúm with a large army, elephants, and steamers, and, moreover, accompanied by a Sherif from Mecca. Presently letters arrived from Makraká and Ayák, in which the same reports were alluded to, and in one of them it was asserted that a corps of twelve thousand rebels had been repulsed before Khartúm, and two or three traitors hanged, one of them being Lupton's coadjutor, Satti Effendi, a faithless scoundrel even for a Dongolaui, who had betrayed the Bahr-el-Ghazal province, and then got off safely to Khartúm. It is certainly singular that this rumour should reach us from three different directions. But the letters from Ayák contained more important news and of greater consequence to us. The members of the mission which was sent off from here had fallen out soon after their departure, and the *Kadi*, who had here assumed the character of saviour of his province, did not shrink from declaring openly before the soldiers and Danagla in Ayák that he was only going to the Bahr-el-Ghazal to fetch the necessary troops, when he would return, and after having hanged me, would have the officers and officials beheaded; we were one and all infidels, and deserved death. The schoolmaster was his sturdy supporter in these harangues, while the other three members were ashamed of the proceedings, and remonstrated. From words they came to blows, and finally the *Kadi* and the schoolmaster got the worst of it, and were sent back to Ladó, where, however, they have not yet arrived, while the other three members of the mission continued their journey through Sabi. I will refrain from commenting on this story; it will show you what sort of men I am obliged to work with.

Meanwhile the troops have arrived in detachments from the south. Much to my sorrow, I have had to give up all but the

absolutely necessary stations, and have completely evacuated the Fauvera, Fadibek, and Latúka districts. Some of the soldiers thus set free have been employed to strengthen the garrisons of stations situated on the river, but the greater part have been ordered to Makraká and Amadi. The stations of Rumbēk, Ayák, and Bufi are also to be evacuated, for they are quite useless, and monopolise three hundred men, who are therefore not available for our help. If ever a steamer comes, and brings arms and ammunition, I shall be in a position to reoccupy every post which may seem necessary. These repeated evacuations do not tend, of course, to raise the prestige of the Government among the Negroes. If the proper course had been taken from the first, we should not be where we are now. The mischievous prohibitive system, the half-measures, the trifling with the slave-question, the hollow phrases about the equal rights of the Sudānese—all these are bearing fruit now, and my prophecies have been proved only too true.

I should long ago have sent an expedition through Bōr to the Sobat, in consequence of the strange absence of all news from Khartúm, just as I did twice during the time the river was closed in the years 1878–80. But Lupton's information that Fashoda had been given up (Sobat has long been deserted) makes me anxious about my men, for they would have to cut their way through Dinka and Arabs along the whole route between Sobat and Khartúm. So this plan is impracticable, and the only thing to do is to exercise patience. A few days ago news reached me that Keremallah, while on the march with his men (perhaps on his way hither!), had suffered a severe defeat from the people of Sabi, and been completely driven back; he himself had fled. Another version confirms the facts of the battle and defeat, but says that Keremallah was not present at all, but had gone some days before to Kordofan in answer to a summons from the Mahdi. Supposing these reports are true, there still remains the difficulty of understanding what can have induced the people of Sabi to fight against their countrymen. Abdullahi Wod Abd-es-Samat, chief of this district and nephew of Mohammed Abd-es-Samat, is a true Kenusi and not a Dongolaui, but there are probably genuine Danagla among his men. However that may be, it would be

a great gain to us if divisions were to break out just now among the rebels themselves. The Danagla who are still in Kudurma wrote to the commander in Wandi (I have the letter) that if he did not join them by the 3d of August, they, the Danagla, would make an expedition against Wandi. To this the answer was given that they might come. Nothing has occurred in Makraká, according to the last news I have received from there, that is, up to August 9.

August 20, 1884.

I can now give additional particulars concerning the sanguinary events in the Bahr-el-Ghazal. I learn from a letter which was sent from there to Rumbēk that the so-called *farukh* (gun-boys), Dragomans, &c., have risen against the Arab occupants of the *zeríbas* of Dirár (Abu Gurún), Auet, Kuchuk Ali, Wau, Bizelli, and Ahmed Auád, have seized all the arms and ammunition, and are now in open war with the Danagla. In consequence of this event, all the *farukh* of the Jur Ghattas district, more than three hundred in number, have deserted, and joined their brethren, previously destroying the small station of Tonj, situated at the ford of the Tonj river. The Danagla in Jur Ghattas are surrounded, and their communications with the west cut off. A certain Birinji is said to have originated this rising. He formerly served as *Sanjak* (commander of a regiment) under Zibēr Pasha and Zibēr's son, and was at last made head of the station Meshra-er-Rēk, probably in recognition of his services. Ibrahim Aga, who deserted from us, is said to have met his death in the sacking of Tonj. I am further informed that the *Kadi* and the schoolmaster, of whom I told you, left Ayák ostensibly to return to Ladó, but after reaching Lēsi they went secretly to Sabi, to reach Keremallah from there, so they have deserted. Besides all this information from Ayák, I received a post from Makraká to-day. Nothing seems to be known there yet of the Negro rising on the Bahr-el-Ghazal, but the news of Ibrahim Aga's death is confirmed—he was well known in Makraká, as he had been there before—and "Doggoru," a small *zeríba* belonging to Jur Ghattas and Tonj, is named as the scene of the occurrence. I find Doggoru marked on your map as one of the streams forming

the Tonj—there may, then, be a *zeriba* standing beside this stream, and named after it. Communication between Sabi and Jur Ghattas, and between the latter and Dem Soliman, is said to be interrupted entirely. So my mission to Keremallah is now reposing in Sabi, and long may their rest continue!

August 31, 1884.

Events have progressed a little. I had had no news from our station of Bōr since the departure of the steamer in April 1883, and I was in constant dread lest it should have shared the fate of Shambé, which was overpowered by the Negroes and destroyed. Some attempts to get letters forwarded there through Bufi by the Elyab people failed. At last I had recourse to Befo, the Bari chief of the Belinian mountains near Gondokoro, and offered him a large reward if he would send a letter to Bōr. He agreed to do so, and I handed him my despatch on July 26. To learn the fate of the Bōr people was not my only object. When Shambé was in great straits, I had sent off the largest and best of my barges there with corn, ammunition, men, and one officer, and I had heard no more of it since. Imagine, then, my delight when, on the evening of August 24, a sergeant and eleven soldiers arrived here from Bōr, bringing the postal arrears and the best of news. Not only was all going on excellently in Bōr, but the barge is there undamaged, and some men have escaped from Shambé. The soldiers, led by Befo's man, had marched from Bōr to Gondokoro in six days along the eastern bank of the river, and had everywhere been well received by the Negroes. But the most surprising information came from the commander of the Bōr station, who writes as follows in a postscript to his latest official despatch:—"I hear from some Tuj men, who are now here (in Bōr), that the river is blocked, and that several steamers have come from the north, but have gone back again to Fashoda." I have immediately made this news known to all my people by a circular; whether true or not, it will inspire them with fresh courage. When I was in Khartúm, I begged Abd-el-Kader Pasha, a very well-disposed man, to grant me a steamer for Ladó, and to assign the station

of Sobat to me, partly to prevent the constant incursions of the Fashoda men into my territory, and partly to establish a regular post to Khartúm. The steamer would have brought the letters as far as Bōr; from there I should have pushed forward three stations to the north, one of which was to have been situated on the lower part of the Bahr-el-Zaraf, where it is navigable all the year, and Sobat would have been the terminus. Thus the post—provided Fashoda still existed—would have arrived at Khartúm in about thirty days, whether the river were closed or open, and we should have had the additional advantage that all necessaries could reach us through these stations, whenever there were obstructions in the river. Sobat was granted me, the steamer was promised—and in the end we were left in the lurch.

Good news seldom comes alone, and so it has happened this time. I heard next that Rumbēk had been successfully evacuated, and that the soldiers and baggage had arrived in Ayák, whence the retreat on Amadi is to be commenced. This station is to be a centre for the defence, but it has lately been greatly endangered, for a number of rebellious Danagla assembled in the little station of Sayadin, and a Sudānese officer, who went against them with some soldiers, was stupid enough to fight and lose a quantity of war material. My Keremallah mission also is in Sayadin, it seems; it only went as far as Boïko, and then returned; now it is in a dilemma. As soon as the soldiers from Ayák arrive at Amadi, and have joined those now there, who amount to about a hundred and fifty, a vigorous attack is to take place. Of still greater importance to us all is the news from Makraká, that the rebels assembled in Kudurma—they had regularly entrenched themselves—have retired and taken the route to Sabi through Gosa, where there is said to have been a sanguinary collision between them and Abdullahi Wod Abd-es-Samat's men. The reports of this event are so confused that we shall do well to wait for further details. The greatest anarchy seems to have prevailed in the Bahr-el-Ghazal province ever since the retirement of poor Lupton Bey.

October 22, 1884.

However much I should like to send you good news about ourselves, I cannot, alas! do more than inform you that we are still alive. Every day brings fresh and often contradictory reports, and this state of things will continue until a steamboat comes and satisfies our curiosity. Meanwhile I have transformed Ladó into a very respectable fortress, with deep moats, high ramparts, bastions, drawbridges, &c. If we are to die at last, we will at least die the honourable death of soldiers. And I believe it is not far off. I dare not let my men know it, but really I have no longer much hope, especially as a later letter from Keremallah says that Khartúm is besieged by the Mahdi in person, and has probably capitulated by this time. Private letters which have just come from Dufilé contain a curious tale,—according to the statements of Negroes who have come to Fatiko, a large body of English soldiers, in fine uniforms and well armed, have arrived at Kabréga's residence on their way to us. Can this refer to Thomson or Fischer? *

November 26, 1884.

Parturiunt montes, &c. The English soldiers are transformed into a caravan of Zanzibar traders, who have come to Kabréga, as usual, to purchase ivory and slaves. I have to thank Anfina's men for this news. They have been sent to me by their chief to beg that the soldiers might return into his country, but this is, of course, impossible now. I have availed myself of the opportunity to write to Kabréga and Mtésa, and have enclosed letters containing news of us all to the French and English missionaries, as well as to the English Consul-General in Zanzibar, requesting them to inform our Government that up to the despatch of these letters (November 17) we were all well, though in great straits, and intended to defend ourselves to the last man. I am certainly very doubtful if these letters will ever reach their destination, but I have done my duty, and if the Government in Cairo or Khartúm

* Joseph Thomson reached the north-east corner of the Victoria Lake in December 1884, whilst Dr. Fischer was there in December 1886.

had ever thought of this route, letters and news might have reached us long ago. They appear to have given us up a long time ago, and not to think it even worth while to try to put themselves in communication with us. The Danagla on the Bahr-el-Ghazal are much more zealous, for they, from Christian —pardon! Mohammedan charity, are bent on freeing us from the unbelieving Negroes and bringing us to the light of the truth.

Should I at any time be able to send you one of the inflammatory letters which the so-called Emir Keremallah thinks good to send us from time to time, you will be astonished at the mixture of fanaticism, lies, and stupidity which are harmoniously blended together in them. He has kept away from the seat of war at present, and contents himself with writing and threatening to appear. The combined troops of Sayadin (that is, our rebels) and those from Sabi and Jur Ghattas have, however, marched at his command against our station Amadi, under the personal leadership of Abdullahi Abd-es-Samat and Tahir Aga, accompanied by a very large number of Dragomans and *basinger*, all armed with Remingtons. The station has been attacked three times up till now, and three times the assailants have been repulsed, and unless they bring cannon or rocket batteries from Dem Soliman, the task may prove too much for them at last. At present we have only to complain of one man wounded. The scoundrels cannot even shoot.

I have had no news from Makraká for some days, but I hope that everything is going on well. The Negroes, and especially the Bombé of Makraká, have hitherto shown themselves faithful confederates, so I am already richly rewarded for the better treatment which I have always striven to obtain for them. Signor Casati is now staying in Makraká, for I requested him to leave Monbuttu at the outbreak of hostilities, as that country is too far removed. He thinks of remaining where he is for the present, and kindly aiding my men with his advice. Dr. Junker is here, and shares our joys and sorrows. His collections are lying in my house, well packed up—will they ever reach Europe? We get along as best we may. We have food, that is, white durrah, meat, and also vegetables; occasionally fruits also. Instead of sugar there is

honey; we make famous candles of wax. In place of coffee we roast the seeds of *Hibiscus sabdariffa*, and I can assure you that the decoction from them is not at all bad—it may even be more wholesome and beneficial. Shoes are made here, and very elegant ones too. We only want cloth for clothing, for the *damúr* manufacturers of Makraká have just gone over to the saints, that is, have run away. I have asked Mtésa to send us Zanzibar men with cloth, which I would contrive to get from them by barter. I am still hoping, in spite of all the past events, that we shall at length be released by the arrival of a steamer from Khartúm; it would indeed be a shame if all Junker's splendid collections were destroyed.

January 2, 1885.

I send you again my best and most hearty wishes for the New Year. Shall we be more fortunate this year than in that just ended? You and all the rest of the world have doubtless long ago counted us among the missing, but we seem to me to be quite invulnerable, and not at all likely to be found dead; therefore I shall not resign the hope of sending you Junker safe and sound as a present some fine day. It has really gone very ill with him this time: the loss of his collections, a twelve-month's useless and unwished-for detention, privations of all kinds, no news from his relations, make up a very pretty list. And yet I am glad that he came hither from the Bahr-el-Ghazal in time, and luckily escaped from that wasps' nest, though, indeed, only to suffer and wait. It is a pity that the fine natural history collections from the Nyam-Nyam country are all lost, and cannot by any means be replaced.

I have little to tell you about ourselves. On December 2 there was a hard-fought battle near Amadi, lasting from early morning till noon, in which twelve of our officers and men were killed and eighteen wounded, most of them by spear-thrusts. This shows that the Agār Negroes had been summoned to the assistance of the Danagla, and had come in great numbers. Our men had stormed the camp of the enemy, and spread great destruction among them, but they were forced to give way on account of the superior numbers of the Negroes,

and they brought back their wounded safely to Amadi. According to the statements of *basinger* prisoners, many Danagla fell, and Abdullahi's (he is the commanding officer) rear is endangered, Mbio's Nyam-Nyam having risen and burnt his *zeribas*. The Agār also, having lost many men uselessly, are said to have retired in displeasure.

Besides the events of war, we have to record those of the elements; two rather violent earthquakes have alarmed the people. On the 26th of December more bad tidings arrived. Our men in Bōr had been nearly exterminated in a foraging raid. I sent off two sailing-boats immediately with corn, men, and ammunition, but I think it doubtful if they will arrive in time to relieve the station. At the same time I despatched a small body of men to Amadi to put an end to the Danagla business. The affair is becoming wearisome. The expedition is composed of 165 soldiers and *basinger*, armed with rifles, who have remained faithful to us, besides about 800 men from Bombé, Morú, and Makraká, armed with spears and shields. These, with the troops and *basinger* already in Amadi, will more than suffice to stamp out the war entirely, unless the rebels be reinforced by fresh additions from the Bahr-el-Ghazal. I do not much expect it, for I have heard nothing for months, even from the illustrious Emir Keremallah, though he used to send me a threatening letter every fortnight. Fancy, the scoundrel sent a robe of honour for me to Abdullahi! The gods alone know where my Bahr-el-Ghazal mission is; I hope the Negroes have given them a settler, for such a select party of rogues could not be got for any money.

January 6, 1885.

Talk of the devil and he'll appear! I have just received a whole packet of letters from Amadi. My late clerk, Osman Effendi, has come from the Bahr-el-Ghazal, and has joined the rebels, with four hundred armed men and a rocket apparatus. He writes to me, as do also Abdullahi and a certain Hassán Ajib, whom Keremallah has sent to conduct us to him. He says that resistance is vain, that all the Sudān as far as Suakin has joined the Mahdi, and that he has just received a

letter from Keremallah informing him of the capture of Khartúm and the entrance of the Mahdi into the town, where a large number of people are said to have died of starvation. Keremallah is in Dem Zibēr; thousands of Arabs and still larger numbers of Bedouins (Bedwân) from Kordofan are with him; Birinji, Zibēr's old slave, will come shortly with about two thousand men to reinforce the attacking army, and then it will be all up with us. Letters from Keremallah himself were also enclosed, with no news, but with copies of the two proclamations whereby the Mahdi is trying to establish his prophetic mission (setting forth his connexion with God and the Prophet, &c.), and a summons to the Bahr-el-Ghazal and this province to join him. These are remarkably interesting documents, and I will give them to Junker. Slatin and Lupton are said to be in close attendance on the new prophet, and to enjoy great honours; but if that is true, why does not Lupton write? The same day on which these letters reached Amadi, the station was vigorously attacked, but the Danagla were repulsed and fifty Arabs left dead on the field. Unfortunately, these fellows spring up like mushrooms.

We must wait and see what happens at Amadi during the next few days. If this affair turns out badly, nothing will be left for us but a retreat to the south, provided we can still accomplish it. There the great chiefs, Anfīna, Kabréga, and Mtésa, will readily receive me, and from there communication with Egypt by Zanzibar might be possible.

January 12, 1885.

The apothecary who has just returned from Amadi denies the truth of all that I have narrated above. There are, at most, three hundred men before Amadi, and the letters of the clerk, Osman Effendi, are intended to mislead us. It may or may not be so: the retreat to the south is decided on.

Junker goes to-morrow morning to Anfīna first of all, and is taking my correspondence with him; if I overtake him, I will send you further reports. I have faith in my lucky star. God protect you!—Yours very sincerely,

DR. EMIN-BEY.

III.

AMADI FALLS, AND A PART OF THE GARRISON HEROICALLY CUT THEIR WAY THROUGH THE ENEMY—THE DANAGLA APPEAR IN THE NEIGHBOURHOOD OF LADÓ, AND THE NEWS OF THE FALL OF KHARTÚM ARRIVES—CONCENTRATION OF THE TROOPS ON THE UPPER PART OF THE NILE—SOJOURN IN MUGGI AND DUFILÉ—ALLIANCE WITH KABRÉGA ANNOUNCED—REJÁF AND LADÓ ASSAULTED BY BARI AND THEIR CONFEDERATES—DR. JUNKER'S DEPARTURE—POST FROM ZANZIBAR—FIRST NEWS RECEIVED OF EGYPT AND EUROPE AFTER THREE YEARS—DIFFICULTIES CONNECTED WITH THE RETREAT TO THE SOUTH—UGÁNDA BEATEN BY UNYÓRO—CASATI'S DEPARTURE—DISCIPLINE BECOMES RELAXED—GLOOMY PROSPECTS.

WÁDELAI, *December* 1, 1885.

I INFORMED you in my last letter of January 25 that Dr. Junker, finding that the situation was becoming more and more dangerous, was preparing to go to the south, with the intention of taking up his abode with Anfīna for the present, and trying to put himself into communication with the missionaries in Ugánda. He left, after Captain Casati had returned to Ladó from Makraká, on January 23. On the 30th, the barges which had been sent to Bōr returned without having effected anything, for the officers there had refused to give up Bōr, because they had too many people belonging to them to march by land, and the barges at their disposal were too small and too few. They now asked for a reinforcement of three hundred men and large quantities of ammunition, neither of which I was able to give them. The *vakīl* of the *mudirië* was satisfied with this answer, and brought me an inventory, from which it appeared that each officer had thirty to forty persons in his household. Bōr must therefore be given up for lost. Meanwhile I sent a fresh supply of corn and some messengers with another order for the garrison to come here—with what result you will hear presently.

Being anxious at the absence of news from Amadi, I sent an official there to bring me a true report of the state of affairs. Before his arrival, or rather because they heard he was coming, the officers resolved on a sortie, which was so

successfully carried out that the entrenchments of the Danagla were stormed, their huts burnt, and part of their ammunition destroyed. Abdullahi Abd-es-Sammat and his brother Mahmud fell on this occasion. Instead, however, of taking advantage of the victory, the commanding officer ordered a retreat, and though the soldiers and officers urged him to complete the work on the next day, nothing was done; the officers caroused, the men suffered hunger. All that was left of money and goods in the magazine was wasted, and the fate of Amadi can no longer be doubtful. I had written many times to the officer in command, ordering him to send the sick and wounded to Ladó, and the women and children to Makraká, and finally, should the enemy's forces become too large, to retreat in good time to Ladó, which is well and strongly fortified, or to enter Makraká, where there is plenty of corn. But I had received either no answer at all to my letters, or they were so worded that it was evident that sordid self-interest had pushed into the background all thoughts of the welfare and troubles of the province, and of the honour of the Government we serve. In any case, I gave orders to the chief of Makraká to take corn and reinforcements to Amadi as quickly as possible, even though the latter should consist only of armed Negroes; but he did not carry out my orders, for he could not leave the wretched Makraká spirits. Captain Casati, who had an opportunity of watching the proceedings closely, will be able to give an interesting account of them.

On the 21st and 22d of February I at last received more news from Amadi. Keremallah had arrived there in person with a large following of clerks—including those that had been sent from here—soldiers, and Danagla. He had written to Murjan Aga, the commandant of Amadi, summoning him to surrender. A Sudānese officer from the Bahr-el-Ghazal, attended by some soldiers, had also paid a visit to Murjan Aga, and invited him to join the champions of the faith, but had not uttered a word about Khartúm, and Murjan Aga had been so accommodating as to let him withdraw unmolested. I can give the remaining incidents concerning Amadi in a few words. In a very short time the station was surrounded on all sides, and cut off even from the river, though the distance from it is very short, and then the brave soldiers had to endure days of

great hardship. When the chief of Makraká did at last come up with reinforcements, and when men, hastily collected from all the neighbouring stations, appeared before Amadi, they were too late to break through the blockade. I cannot even yet understand why the commandant of Amadi, knowing, as he did, that relieving forces had arrived within two hours' march of the station, never attempted a sortie. The soldiers before Amadi were again and again led to the attack by their officers, but lost their courage, and at last ran away. The chief of Makraká, instead of sticking to his post, collected his scattered men, and went back to Makraká and his spirits. All was then given up for lost. On March 28, a rumour spread abroad in Ladó that the garrison of Amadi had cut its way through to Makraká. (On the same day I received letters dated March 9, 1885, wherein Dr. Junker's safe arrival at Chief Anfína's was announced.)

Three soldiers from Amadi came into Ladó on March 29. They related that the soldiers had repeatedly urged their officers to make a sortie and cut their way through, but that the latter had always hung back, and probably intended to yield to the enemy. At last the men became desperate, and, led by six brave officers, left the *zeríba* against the will of their superiors, cut their way through the Danagla, inflicting heavy losses on them, and took the road (at least most of them did) to Makraká. Murjan Aga followed them at last when he found himself deserted. All the soldiers had taken their arms and ammunition with them. There remained behind in Amadi, Hassán Aga, a Sudánese lieutenant, ill; Mohammed-es-Sayad Effendi, Egyptian captain, voluntarily—after he had urged the soldiers to surrender, and they had refused; Mustapha-el-Arian Effendi, clerk, voluntarily; also some corporals and soldiers, most of whom were ill. I must add that this account was fully confirmed afterwards; the commandant of Amadi and two of his officers had actually planned a surrender, and had addressed a letter to Keremallah with this intention, but the greater part of the officers retained their honour amidst many faults, and the soldiers in particular behaved splendidly, though for nineteen days they lived on cow-hides, and at last ate their sandals, while their superiors drank spirits and made themselves comfortable.

Finally, on March 31, I was rejoiced to hear that three officers from Amadi, with about 260 men, had arrived safely at Wandi in Makraká. The troops recalled three months ago from Monbuttu had also reached Makraká at the very last moment, after their commander had put off the march, under all sorts of empty pretences, but really in consequence of letters sent to him by the rebels on the Bahr-el-Ghazal, urging him to wait for the course of events. Certainly the incapacity, and often the downright malevolence, of our own officials have played a great part in all the misfortunes that have hitherto befallen us. Disobedience is the order of the day, and every one seeks to protect his own interests only.

On April 1 the civil and military officers in Ladó handed me a document, wherein they petitioned that all the stations in the south should be given up, and that we should restrict ourselves to the line from Ladó to Kíri. Suicidal as such a suggestion was, for we should then be confined to the most unfruitful part of the province, and consequently throw ourselves into the jaws of famine, besides cutting ourselves off from the only way of retreat which would at last be open to us—unfortunate as this motion was, persuasion would have effected little, and so I had to give at least an apparent consent, and issue the necessary orders.

According to the last news that has reached us, the Danagla had sent off skirmishing parties to within two days' march of Ladó, in order to incite the Negroes against us, and had then concentrated themselves in Amadi. Letters also arrived from Keremallah and Osman Effendi on April 3. The first, a *soi-disant* official despatch, told me of the events that had taken place in and around Amadi, said that the garrison, though summoned five times to surrender, had refused, that then the siege was commenced, and that finally the soldiers had forced their way through, and had taken the road to Makraká. Murjan Aga, the commander of Amadi, accompanied by the lieutenant Rabih Aga, had been overtaken on the way, and both had been slain, their heads being taken to Amadi. More than two hundred deserters, Dragomans, *basinger*, &c., were in Amadi, besides many soldiers and officers. The letter concluded with a summons to appear at

Amadi with the higher officials of the province within ten days of *Jumadi-el-Akhir* 10 (March 26); otherwise he, Keremallah, would march from Amadi against Ladó on the 20th of the said month (April 5); whatever might then happen would be my own fault. The second, also from Keremallah, but directed to me privately, informed me that he was only coming to support me; no harm should happen to me if I would come and surrender. The third letter is signed by some of our own people, who have joined the Danagla in Amadi (Mohammed-es-Sayad, Egyptian captain; Yussuf-Bei, Sudānese joiner; Abd-el-Aziz Aga and Hassán Aga, Sudānese lieutenants, and several corporals). These informed me that the officers in Amadi were drunk night and day, while the soldiers ate old leather and hides to appease their hunger, and they invited me to give myself up, for that they, the writers, had not received any bad treatment from the rebels. As Khartúm is not even mentioned in any of these letters, we may almost conclude that our opponents had also received no news from there for a long time. The bearers of the letters, two Negroes of Amadi, said that a number of Jellabas had come from Kordofan, that the slave-trade was in a very flourishing state, and that the slaves I freed in 1881 had been reclaimed.

Meanwhile the Danagla in Amadi had not remained idle, but had pushed forward their outposts again to within three days' march of Ladó, and had instigated the Negroes to slay unmercifully any stragglers from Amadi, and to close the road to Makraká. This being the case, I was obliged to send my letters to Makraká by the road I had lately opened through Rejáf and Rimo. A detachment of the enemy had dispersed the few officers and soldiers in Kamari, near Wandi, and then marched against Wandi, which was untenable owing to its position. The soldiers therefore retired in good order towards Rimo, intending to take the road from there to Rejáf. But before they could reach it, the Danagla attacked them fiercely, and were thoroughly defeated, losing a large number of men, and flying precipitately. The march forward was then commenced, and detachment after detachment arrived safely at Bedén, with their sick men and followers. I sent some clerks and officials from Ladó, where scarcity of corn prevailed, to

the south and to Gondokóro, where they could find food, and I was myself engaged in an inspection of the fortifications, when, on April 18, I was again honoured by despatches from Keremallah. The letters contained the usual invitations to us all to join the champions of the faith, but the most important communication was the news that Khartúm had fallen. I should find the details, he said, in an enclosed copy of a letter from the Mahdi. This letter, dated *Rebi-ul-Akhir* 12, 1302 (January 28, 1885), contained the news that Khartúm was taken by storm on the morning of Monday, *Rebi-ul-Akhir* 9 (January 25), and that every one in it was slain except the women and children. Gordon, the enemy of God, had refused to surrender, and he and his men had fallen; the Mahdi had lost ten men only. The letter, written in old-fashioned Arabic, and imitating in its expressions the older chapters of the Koran, concluded with an injunction to Keremallah to act in a similar manner here and in the Bahr-el-Ghazal. No mention is made about a steamer being sent to the Meshra-er-Rēk, although it was such an important matter. I have returned no answer at all to these last letters.

On April 19, the soldiers from Makraká came safely to Bedén and Rejáf, without being attacked again. On the 21st the boat which had been sent to Bōr with corn came back; the garrison still refused to come here—they must therefore take the consequences. On the 23d a reinforcement of 130 men marched into Ladó, and on the 24th I called together a council of all the officers to discuss the measures to be adopted to save us from famine, and to guard against unnecessary exposure to danger. After mature deliberation, and when I had retired for half an hour, resigning the chair to Major Rihan Aga, in order that the decision might be quite impartial, the following resolution was carried, in the presence of Captain Casati:—"Considering that there is not corn enough in Ladó, Rejáf, Bedén, &c., to support the men that have come from Makraká as well as our own people, that the next harvest is still far off, that by sending out foraging parties we should exhaust our meagre supply of ammunition and be left at the mercy of the Negroes, while, on the other hand, it is impossible to procure corn by

any other means—having regard to all these circumstances, it is resolved that the women and children shall be sent to the south, that the stations shall be occupied by soldiers only, to the exclusion of all civilians, and that they shall be given up if needful, so that all our strength may be concentrated in the south. The line of retreat to be chosen towards the south, because the route northwards beyond Bōr is impassable, and, further, we do not know whether Khartúm has not actually fallen, while we possess strong points of support in the south at Dufilé and Wádelai, where there is plenty of corn and rich lands in the rear. Finally, we should have a chance of sending letters and men to Zanzibar and Egypt, or, if everything went against us, of throwing ourselves into the arms of Kabréga or Mtésa's son." The requisite orders were issued immediately; three companies remained in Ladó under the command of Major Rihan Aga. All the civil functionaries had already been sent southwards, while I only and three clerks were left.

On April 25 I went myself, at the request of the officers, to Gondokóro, to supervise the transport to the south, but I soon perceived that the men were not really in earnest, though the Danagla had advanced their outposts as far as Ladó. It was not only that they loitered and made evasions, but rumours came to my ears which seemed to intimate that the officers in Ladó had determined, after my departure, to advance to the north instead of to the south, a project which held out no hope of success. I at once sent off an aid-de-camp with a letter to the Major, ordering him to put a stop to these proceedings. In answer, I received a letter, signed by all the officers, begging me to believe in their unalterable loyalty, and urging me to go southwards as soon as possible and to manage personally the transport of corn to Bedén, Rejáf, and Ladó, for the corn there was coming to an end. The impression made upon me by all this was, that I should not be able to depend on the gentlemen in Ladó when in difficulties, and later events have justified my suspicions. Nevertheless, after staying a fortnight in Gondokóro, where also corn was scarce, I set out to go to the south, after first giving the most emphatic orders that the Bari should be well treated, lest they also should be roused to rebellion, and that as large a detachment of troops as possible

should be sent to Bōr to bring the men from there, if it were still practicable. A corporal overtook me at Bedén, who had been captured near Amadi by the Danagla, and had escaped. He asserted that they had lost a great many men both at Amadi and before Rimo, and also that their ammunition was coming to an end. They were busily engaged in collecting slaves and sending them to the Bahr-el-Ghazal. Keremallah had issued orders from Kamari to make preparations for retiring to the Bahr-el-Ghazal; he was coming shortly himself. A large number of men who actually came from there had already marched off. The twenty-six soldiers who had been made prisoners were to be chained, and employed in the transport of goods. When the corporal heard this, he made his escape with three of his comrades, but he could not say where the others were, for he had swum across the river at Amadi and left them behind. He said that the prisoners were neglected, and suffered severely from want. The Danagla had fired twenty-five cannon-shots to celebrate the taking of Khartúm. This was the first statement received from an eye-witness. Some days later, the corporal's three companions arrived at Kiri, having also succeeded in escaping, and they confirmed the accounts I had received in all essential particulars.

I next went to Muggi, where I made a longer stay, and succeeded in sending off to Ladó a good quantity of corn and some ground-nuts for making oil. Meanwhile, several fugitive soldiers from Amadi had arrived in Ladó, all of whom agreed in stating that the Danagla were getting ready to march off to the Bahr-el-Ghazal, and were in a great hurry about it. This could only be explained by the supposition that their ammunition was really almost exhausted, and that they had no desire to wait here for the rainy season, when the swollen rivers would cut off their retreat from this country, which is already famished; possibly, also, they wished to go to Khartúm as soon as they could. Again, it was quite within the bounds of possibility that the Mahdi had at last sustained a defeat, and was drawing his men together. We cannot, of course, decide the question at present. We first heard of the definite departure of the Danagla when at Laboré, but no particulars reached us. I stopped at Khor Ayu, near Laboré, till June 23, fully occupied

in expeditions after corn, tending the sick—the wounded from Amadi—and administrative business. Captain Casati, who had left Ladó later than I did, overtook me in Laboré. Letters reached me there from Dr. Junker, telling me that he had not been successful in establishing the communication he desired or in forwarding letters, though he went in person to Kamisoa, Rionga's son, and met some of Kabréga's men there. A post came also from Ladó with the announcement that a Bari dragoman, whom the Danagla had carried off from Makraká, had arrived there. He had gone with them on their retreat to the Bahr-el-Ghazal as far as Gosa, and had then escaped. At the same time, all kinds of reports spread through the province that the Danagla on the Bahr-el-Ghazal were at war with foreigners and Negroes; even the names of the commanders were given.

After sending off about four hundred *ardebs* of corn to Ladó, I went at length to Dufilé, in consequence of representations made to me officially by the Major in command of the second battalion there, that he found it very difficult to send corn to Ladó, and could not also supply us at Khor Ayu. After I arrived, the transport from Dufilé continued. Captain Casati went on to Wádelai, and I thought of following him, partly to see if I could not restore my former relations with Kabréga, and send letters to Ugánda, Zanzibar, and Egypt, and partly to relieve Dufilé a little, for it was overcrowded. I left on July 9, and arrived at Wádelai on the 10th; this is to be our headquarters until better times come.

As we are cut off from all communication even with Makraká, our only sources of information are, of course, rumours. To show what they are like, I give you a translation of a letter sent to me from Ladó on August 10, 1885:—"We have questioned Chief Kenyi about the rebels, and he tells us that they went to Wau, and have been driven off from there; he has heard that Bakhit Bey and Nur Bey are there, and an Englishman of high rank with them. The inhabitants of Fashoda are said to have risen, but also large numbers of soldiers to have arrived there. After the festival the soldiers will go to Bōr, as you ordered. We hear from the people that the Danagla have thrown the cannon they captured at

Amadi into the Sayadin river. One of their runaway servants has arrived here; he accompanied them as far as Jur Ghattas, and escaped, when they started for Hofrat-en-Nahas. He has heard that war is going on in Shakka, and also that Nur Bey, Bakhit Bey, and an Englishman are on the Bahr-el-Ghazal." Such hallucinations are rife here, but the real fact is, that if a legitimate Government still exists in Khartúm, as I hope it does, it must have given us up for lost long ago, or has supposed that I should hand over the province at once—the most baseless presumptions possible. Shame upon those who have forsaken us—without even asking after us!

It was now my principal task to open up the way to Kabréga. Dr. Junker's futile efforts showed me that nothing could be effected with the help of Anfína and Kamisoa. If I once got command of the road to Kabréga, I might be able to send a letter to the missionaries, and another to my old friend, the *Katikiro* (Prime Minister) of Ugánda, and through him—by means of money and fair words—to the Arab merchants of Zanzibar who are domiciled in Ugánda. This would be a great gain. I could count on Kabréga's help, for he had always been kindly disposed towards me, and received me warmly, while two of the Arabs living in his capital were old acquaintances of mine in Ugánda, and honest men. At last, on August 21, I succeeded in finding a messenger, who at once took charge of letters and presents for Kabréga and Masudi, and promised to deliver them faithfully. He started off early on August 22, taking our best wishes with him. The following route was prescribed for him: from Wádelai to Faroketo, one day; from Faroketo to Chief Boki's, on the lake, one day; from Boki by boat to the eastern shore, and along the shore to Kibiro, two days in good weather; from Kibiro to Kabréga's residence, two days; that is, ten to twelve days, including halts.

I had sent men to Makraká from Rejáf, and news came from there at the beginning of September. All the stations were untouched, but deserted; some chiefs had been carried off by the Danagla. None of the latter remained either in Makraká or in Amadi; Abd-es-Samat's stations were also evacuated. We have no news from the Bahr-el-Ghazal, but

fights between Negroes and Danagla are said to have taken place. "Thus it is now certain that the country is clear of Danagla; but are we any the better for that? No one can guarantee that they are not, perhaps, concentrating themselves in Dem Soliman, to return in January 1886, at the expiration of the rainy season, strengthened by all sorts of ruffians from the Bakara, &c. But suppose they do not return? We are a handful of men, with a very small amount of ammunition, without supplies and communications of any kind, in the midst of thousands of Negroes excited by the wars—and what if these Negroes should rise against us? It is quite clear that we have nothing to expect from Khartúm, at any rate until letters from us reach Egypt—so let us send letters at any price."

I quote this passage from my diary as a proof that I did not delude myself, but was quite aware of the true state of affairs. I was therefore the more delighted when three of Kabréga's men arrived here on the evening of September 20, the sacrificial festival, and at once hastened to me. They brought no letters, but greetings from Kabréga, and a hearty invitation to come to him. Chief Boki had taken the letters and presents from the man I sent, pretending that he dare not send letters to Kabréga without his consent, as there might be some magic in them. But he had despatched a messenger of his own to Kabréga to tell him that the chief of the Turks in Wádelai wished to enter into communication with him. Thereupon Kabréga had immediately sent off three men, with orders to find out who the chief of the Turks was, and what he wanted. Kabréga had suffered much at the hands of the Wagánda, who had made constant incursions since Mtésa's death. His men formed a striking contrast to mine, being clothed in neat cloths, while the latter wore skins. My men, however, are willing and brave. There is no better and more workable material for soldiers in the world than our Sudānese. I sent back Kabréga's men on September 28 with letters, presents, &c., and am now expecting a proper embassy from him. The great lords of the south will take their own time.

The Wanyóro had only just left when the steamer came from Dufilé bringing very sad news. Bōr had, after all, been de-

stroyed by the Negroes, just as the men were at last starting to march to Ladó. The Major in command at Ladó had not thought of sending a single soldier to Bōr, in spite of all my orders; but after the disaster had occurred, he despatched about two hundred men there in a great hurry, without my permission, and forgetting that that number would be far from sufficient. They had reached Bōr safely, and recovered a quantity of ammunition, &c., but, instead of being satisfied with this and returning, they had advanced northwards, probably at the Major's desire, had been beset by swarms of Negroes on the Bahr-el-Zaraf, and thoroughly dispersed in a panic, without having fired a single cartridge. Only forty-three men out of a hundred and eighty have returned up to the present time. The immediate consequence of this was that the Bari naturally revolted, having perceived our weakness. On October 4, in the early morning, Ladó was attacked on all sides at once by the Bari, Dinka, Shir, and Nyambara combined, but the attack was repulsed. It is now besieged, and I must send troops at once to relieve it. My old friend Befo, of the Belinian mountains, is at the head of the movement.

On October 19 some more men arrived here from Kabréga, led this time by my old travelling companion and Dragoman, Msige. His instructions were to see if the chief of the Turks were really Kabréga's old acquaintance, Emin Effendi, and, if so, to put himself under his orders; but if it were another man, to return at once, for Kabréga would not have anything to do with the Government. The men were sent off in great haste, and had not been able to bring with them sufficient cloths or other things for sale. The Arabs had prepared a quantity of wares to send, but Kabréga told them they had better wait until Msige returned with his report, and then, if the road were safe, they could go with their goods. Msige brought four letters, two from Kabréga, one from Abd-er-Rahman-bin-Abeid-bin-Hamis-el-Habeshi, a relation of Said-Bargash, and one from my old Ugánda acquaintance, Masudi-bin-Abeid-bin-Hamis. Kabréga's letters contained the usual tales about the outrages the Turk had formerly committed in his country, and the cool request that I should

kill Kamisoa and Anfina for blocking the way between us. Then followed great praise of myself, and an invitation to come to him (Kabréga), backed by an appeal to our old friendship. He also reproached me for not having written to him about the war and our losses, and for not informing him whether Khartúm still held out or not.

Abd-er-Rahman's and Masudi's letters assured me of their friendship, and offered to send me all that was necessary. A number of presents accompanied the letters, most of them from Kabréga himself: a whole piece of madapolam, a piece of coarse American shirting (you may imagine what a singularly valuable gift it was in these hard times, and how wonderful it was for us here to receive cloths from Zanzibar), coloured handkerchiefs, Ugánda mats, bark cloths, salt, beans, very good tobacco, and also coffee. Everything was at once divided among my superior officers—in these days we must all be equal. I hope also by sending a little linen to the officers farther north to inspire them with some courage and willingness. The great thing is, that by God's help a way has now been opened, and I will take care to keep it open. I insert here the information afterwards given me by Msige. Mwanga, the new ruler of Ugánda, has had all his father's officials killed, with the sole exception of my old friend, the *Katikiro*. According to the statements of the Zanzibar people, four foreigners are settled in Ugánda. The old strained relations between the two countries still continue, but that does not prevent men coming and going for commercial purposes, and the Arabs send and receive their letters and goods unmolested. No direct road now exists between Unyóro and Karagwa, for it has been closed by Chief Ntali, of Nkole. Abd-er-Rahman, the merchant, is getting ready to return to Zanzibar with his ivory. Msige's men have, however, brought some cloths privately, and so an active trade has sprung up here. Ten *mejidie* (£1, 15s.) are paid for eight ells of madapolam; there was quite a struggle for coffee. Of course, I sent news to Dr. Junker at once, and was almost obliged to admit that he had better decide on travelling southwards. I have also written two letters, one of which I am sending to Kabréga, the other to the Arabs, with a request that they may be forwarded to the

missionaries in Ugánda—if only one reaches them it will suffice. Each of these packets contains two identical letters in English and French, in which I request that the Consuls-General in Zanzibar, and through their mediation the Egyptian Government, may be informed of our situation, that messengers may be sent to us from Ugánda, and that they may bring a few old newspapers to inform us what has taken place in the Sudān and Egypt since 1883.

On the 31st of October the steamer came from Dufilé. The communications with Ladó and Gondokóro are still uninterrupted, and all the Dragomans have fled from Rejáf. The cause of the Bari movement is now clear to me. As long as I was present and prevented any interference with their affairs, and particularly any attacks on their herds, they remained comparatively quiet, although they were excited by the occurrences among the Dinka at Rumbēk, and afterwards by the war against the Danagla, who, by sending emissaries with all kinds of pretexts, tried to incite the Bari to revolt. The complete defeat of the soldiers sent to Bōr, and the desire which then arose to imitate the Dinka by seizing arms and ammunition, but, above all, the proceedings of the commanders of the stations at Ladó, Rejáf, and especially Gondokóro, who, in spite of all warnings, made requisitions of cattle under all sorts of pretences —such are the causes which will lead to the loss of the whole Bari district; for, should we be able to crush the movement by sheer force, the gain would not compensate for the expenditure of ammunition, which is now so indispensable, or for the irreparable loss of men. Owing to the scarcity of corn in the Bari district, and the impossibility of sending it from the south, the stations would fall from starvation, and I am therefore inclined to make arrangements for the evacuation of Ladó and Gondokóro, to collect the men together in Rejáf, and gradually retire on Dufilé. If we collect together, it is perhaps possible, with good management and the ammunition we have in hand, to maintain our position for another year, which may be long enough to send letters and men to Egypt and receive an answer. But will *Messieurs les Officiers* obey orders?

On November 1, I sent Kabréga's men in a steamboat to Kibiro, on the lake, with some presents and the above-mentioned

letters, as also a few presents for the Arabs. Everything now depends on Kabréga proving compliant. But if all means fail, and he too refuses his assistance, it will still be possible to send 150 men through Mrūli to Ugánda, though force may have to be used. Kamisoa, Rionga's son, has sent men to me, but they maintain that it is impossible for them to send letters direct to Ugánda. Perhaps here too gentle pressure will be efficacious. I have sent the men back with a great show of anger and without presents, and they promised to do their utmost.

So much for the state of things up to the present time. I have long kept up hope, but it now seems quite certain that we must expect absolutely nothing from the north. Therefore we shall try the south. Till now I have succeeded in keeping my handful of men together. Who can guess what the future will bring?

December 3, 1885.

The steamer, which arrived to-day, brings the news that Ladó is not yet relieved. Rejáf has been attacked by a large number of Bari and Dinka, but they have been repulsed with a loss of about 500 killed and a large number of wounded. In a later assault, also, the Negroes lost a good many men. Rejáf is well fortified and provisioned, but all these fights avail nothing. I have therefore sent reinforcements once more, and repeated my orders for the people to retire. I have no news of any kind from Kabréga.

January 2, 1886.

To begin with, I wish you a happy New Year. Will it bring us luck also? Let me give a *résumé* of the events of the last month, if I may call them such. On December 10 news reached me that Dr. Junker had arrived in Fagango with the porters I sent from here, and early on the 11th I steamed up-stream in the *Khedive* to fetch him. In the evening we were together in Wádelai. Two days later, the other steamer brought news from Dufilé that the troops in Rejáf had been successful in their operations against the Bari, and had taken a number of cattle. The reinforcements sent from here had

arrived, and preparations were being made to relieve Ladó. At last, on the 18th, the longed-for news came that Kabréga's men were on the way. A letter from Kabréga informed me that their departure had been delayed because the Arabs had no wares; he had not, however, granted the Zanzibar men permission to come here. On the 23d the men arrived, and with them seven boys whom Kabréga had sent to learn to read and write Arabic, and a chief, who was to remain here "to manage the speedy despatch of letters," *i.e.*, to keep a watch on us all, and to inform Kabréga of all occurrences, and send him news as quickly as possible. Kabréga writes that my presents had arrived, and he also sends some to me, begging my acceptance of them; then follows a very respectable list of articles which he wishes to be despatched to him. I quote some of these demands for your edification: ammunition for his revolvers, a couple of asses, a thousand sheets of paper, an Arabic book, boots, shoes, illustrated papers, a trumpet, a drum, medicines, a parasol, a screw-driver, files, needles, buttons, &c. He sends a curious request for me to teach the seven youngsters he has sent to read and write industriously (the language of the Nassara),* and not to let them play. In a second letter he repeats his invitation to me, and says that the Arabs had sent to Ugánda for goods: he sends what was in store. "I have sent your letters, not to the Nassara (probably the English in Ugánda are meant), but to Zanzibar. I have also heard that English and Americans have arrived in Usukuma, and, if you come to me, you will hear all with your own ears, whether it be good or bad." If Kabréga has really sent my letters direct to Zanzibar by the Arabs, I am not exactly pleased, but there will always be *quid pro quos* till Junker makes up his mind to go to Ugánda. Kabréga's men say that a steamer brought by Europeans has been attacked by the Wagánda in the north of the Victoria Lake, and after the loss of a European, has steamed off to the south. Probably it is all a myth. It is a fortunate thing that I received a quantity of cloths at Christmas. All got a share of them, heathens and Christians, so that we look quite respectable

* The language of the Christians.

again. I shall now begin to give ivory in exchange for cloths for my men.

Junker has decided to go to Kabréga, and I hope he will proceed from there to Ugánda as soon as possible. I am sending our apothecary, Vita Hassan, a brave young fellow, as representative of the Government. He is first of all to take up his abode with Kabréga, and I have given him full instructions. I gave a packet to Junker for the English Consul-General in Zanzibar, containing, besides official letters, a couple of lines for you. This morning (January 2) the steamer *Khedive* has taken the whole party to the lake, and Junker and Vita are to disembark at Kibiro, whence they can reach Kabréga in two days' march. Well, we will call down upon them the old blessing, Q.D.B.V. Our chief aim now is to obtain news through the missionaries in Ugánda, even though it may be old. My men's confidence in me is doubled since they have seen the cloths. Now for a newspaper, and I will hold my ground for two years more. But Junker must go to Ugánda for it, and I still do not know whether he will go.

WÁDELAI, *February* 20, 1886.

At last it seems as if a beam of hope were going to burst upon us. But let me begin at the beginning. After his departure, Junker wrote me a few lines from Kibiro, to say that he had arrived safely, and was waiting for porters to go to Kabréga. I received several contradictory reports from Ladó. I was informed that a strong detachment of Negroes (Dinka [Elyab, Bōr, Agār], Bari, Nyambara, Fajelu, Mándari) were encamped behind Jebel Ladó, with the intention of attacking Ladó and Rejaf. Then a female slave, who had been captured by the Negroes in Bēr, ran away from them and came to Ladó. She stated that she had gone in a boat with her master from Bōr to Fashoda, where she saw some Shíluk quartered in the town. They had only burnt the *mudirië* (Government offices). The river at Fashoda was open. Soldiers and Danagla were stationed in Kawa, and had made raids against the Shíluk. She had heard nothing of the Fakī (Mahdi). Next came the news that these Negroes

had retired, and that a detachment of marauders which had remained behind had been defeated, and some of their rifles taken. At last, on February 14, some messengers came from Kabréga with long letters from Junker and Vita. And now listen! One of the servants of the Zanzibar merchants came into Vita's hut towards evening on February 4, with one of Kabréga's men, and, when the latter was not looking, he threw down two notes before Vita, and then went off with his companion. Vita took up the notes, and found that one of them was directed to himself in Arabic, and the other addressed in French, "*À Monsieur le Voyageur dans cette ville.*" This he immediately handed to Junker; and what were the contents? A certain Mohammed Biri, an Egyptian, "*ancien interprète de l'Association Internationale pour l'exploration de l'Afrique,*" announced that he had arrived from Ugánda the evening before disguised as a trader, and that he had news for us all from Egypt and the coast. He would be able to visit the gentlemen and talk with them in a day or two. Dr. Fischer had come as far as Usukuma (compare the news sent me by Kabréga given above), but the King of Ugánda had refused to let him pass through his territory, and so he had gone to Manyuema. You may imagine Junker's anxiety when he read the letter. He would no doubt have liked to send me further details, but Kabréga sent off his men here the next morning. So there is nothing for it but to wait patiently. Junker had written on January 19 to Mr. Mackay in Ugánda, asking for porters; from there too an answer may have arrived. I sent off an officer to Junker and Vita early on the 18th, under pretence of sending ivory to Vita for the purchase of cloths, and I am expecting the steamer to return from the lake to-day or to-morrow. I wrote to Kabréga, begging him not to detain the officer, and so we shall probably know how we stand in about fifteen days. At any rate, there is a very good prospect of at least getting our letters forwarded to you. Another messenger from Ladó came on the 16th; this time too it was a Negro female slave who had escaped. According to her, the Negroes had started off hurriedly from Jebel Ladó because a man had brought news that troops and Danagla had come up from the Bahr-el-Ghazal by steamer, and had laid waste

the whole country as far as Ayák. This news was confirmed by four Agār men, who arrived some days later, and in consequence of it the Negroes had dispersed. Moreover, the famous Dinka chief, Kojur Dentonj, had fallen in the last fight before Ladó. I do not feel quite comfortable about these reports—if they are anything more than mere Negro gossip. After recent events, it is not likely that the Government would employ Danagla as well as their own troops. Is it not more likely that this is a new expedition of Danagla from Dem Soliman or even Kordofan, among whom there would probably be large numbers of deserters and prisoners from the Bahr-el-Ghazal and Kordofan?

WÁDELAI, *March* 3, 1886.

On the afternoon of February 26, the sergeant-major, whom I had sent with Junker and Vita to Kabréga, appeared quite unexpectedly, and laid down before me a large packet of letters. Besides letters from Dr. Junker to me explaining everything in detail, there was an official despatch from Cairo, signed *Nubar*, a letter of Sir John Kirk's, forwarded to me by my agent, and copies of letters from Mr. Mackay, Mr. Ashe, and M. Lourdel—all of them in Ugánda—to Dr. Junker. Mr. Mackay had also kindly sent to Dr. Junker two packets of Reuter's telegrams extending over the year 1884, and up to November 2, 1885. The Egyptian despatch, written in French, informs me that the Government is unable to assist us, for the Sudān is to be given up, gives me *carte blanche* to take any measures I please, should I decide to leave the country, and, further, authorises me to draw on the English Consul-General in Zanzibar. It is a cool business despatch, in the fullest sense of the word, not acknowledging by a single word the cares I have borne for three years, my fights with Danagla and Negroes, my hunger and nakedness, nor giving me a word of encouragement in the superhuman task of leading home the soldiers, which now lies before me. However, I am accustomed to this sort of thing. In the years 1878–80, during which the river was blocked for twenty-two months, I held the country and people together, and showed for the first time that we could maintain ourselves by

our own strength without any supplies from Khartúm, and not only did I spare the Government expense at this time, but also proved practically that the province could, under our honest administration, yield a surplus, after providing for its own expenses. I began to plant rice and sugar, to set in order the administration, and to extend the boundaries of the province. Yet who has given me even a good word? *Passons la-dessus!* The late Sirdar Ekrem Omar Pasha once said to me that in the East one must have powerful patrons, plenty of money, or a pretty wife, in order to obtain acknowledgment of one's services. Can he have been right?

Sir John Kirk has written me a very kind letter, and I am indeed deeply grateful to him. He has moved heaven and earth to assist me, has induced the Sultan of Zanzibar to write letters to the King of Ugánda and the Arab merchants, commending me to their care, and has certainly done for me more than his duty demanded. As to the letters from the missionaries to Junker, I have only to say that they were private letters: there was a note for me on the margin of Kirk's letter, telling me not to retreat hastily, and that they would try to write to me. You can easily conceive with what interest I ran over the despatches, if you call to mind that the last news from Europe—in a letter from Dr. Hartlaub—reached me in the beginning of January, and the last from Khartúm in the beginning of February 1883, that is, exactly three years ago. So now I had the whole of the sad drama before me, which ended in Gordon's death, the retreat of the English, and the loss of the Sudān, and it came back to my mind most vividly how the editor of the *Times* had remarked in a note to a communication from me that I took too gloomy a view of the situation; for I had warned the English not to think too lightly of the state of affairs in the Sudān, and not to let themselves be deceived by an illusory religious movement when very different objects were really aimed at. Poor Gordon! I see in the despatch that he was killed by a volley on the way to the Austrian Consulate; and so Hansal also—the brave Hansal—is probably numbered among the victims of these unfortunate events. Besides the occurrences in the Sudān, I find allusions to colonies started by the Germans in the west

and east of Africa, the Pacific Ocean, and elsewhere. Reading these short and meagre telegraphic notes really makes one nervous; the statements are so abrupt that it is vain to search for the connexion between all the events. Excuse these long digressions, which will certainly not interest you. I do not as a rule fill my letters with reflections and personal opinions, but I may be pardoned this time in consideration of my exceptional position. And exceptionally brilliant it is!

In Egypt and elsewhere they have certainly no notion of the difficulties of my situation. They simply suggest to me the way to Zanzibar, just as they would a walk to Shubra. You will have perceived from the information contained in the foregoing leaves that I cannot depend with any certainty on my own officers. The greater part of my men, especially the officers, have no desire to leave this country. I have repeatedly drawn the attention of the Government in Khartúm to the fact that it is absolutely necessary to change the officers here every second year, and also the men, in part at any rate, lest in troublous times our movements should be impeded by innumerable obstacles. I have not even received an answer. The greater part of our soldiers, coming, as they do, from our own districts (Makraká, Dinka, &c.), and having never seen Egypt, naturally prefer to remain here and live as their fathers did, while the Negro soldier sent hither from Egypt, whether he be an officer or a private soldier, has forgotten in the lapse of years what strict discipline means, and, further, has adapted himself to the country to such a degree that it has quite taken the place of his native land. Each has his family, often a very large one, if all its dependents be counted, and each has his couple of goats or cows. Every one knows that the journey is long and the toils great, that many days of hunger and hardship lie before him, and that when he arrives in Egypt the loose bonds of discipline will be tightened again, that he must then say farewell to the *mrisa* jug, and that the "*T'a'āli ya valad*" (Come, O boy) and "*Ruh ya valad*" (Go, O boy) must come to an end. . . . Then consider how little attention has been shown to our soldiers from Khartúm, how they have been left without supplies, without clothing, without pay,—but enough, you can now understand why the men do not wish

to move. Besides, it is quite impossible to make a Sudānese understand why the Government has given up the Sudān, and he refuses in so many words to believe that a horde of Danagla is able to crush a well-trained army. Even now it is believed here that the news of General Hicks's defeat in Kordofan is a fiction. All my efforts during the last twelve months to concentrate the men in the south, have had no other result hitherto than to draw from the first battalion, stationed in Ladó and the neighbourhood, or at any rate from the officers, a categorical declaration that they would not give up Ladó, &c. Now, if I send copies of the letter from Egypt, written in French too (an error much to be regretted—it should have been written in Arabic), it will at least be considered a fabrication, that is, a device of my own, and will not be obeyed. But something worse may happen, for when the people are once convinced of the impotence of the Government, universal anarchy may ensue, and the destruction of all the white men may be the first result. I do not yet see how I am to get out of this dilemma. God help me! Of course I wrote at once to Nubar Pasha, promising to do my utmost, but could not give the foregoing details, as the letter might be opened in Ugánda or elsewhere. The reason which induces me to communicate them to you is that, should we come to grief, you at any rate will know the state of affairs, and will be able to explain it to the authorities.

By a most unfortunate coincidence, war has just at this moment broken out between Ugánda and Unyóro; as far as I can make out, it is the consequence of endless misunderstandings. The English missionaries in Ugánda seem also to have lost credit to some extent. I have written to the king, and to my old friends, the *Katikiro* and the Arab, Hamis-bin-Holfán, begging them to send me some men from there. I hope for good results. I lay great weight on the fact that in all my dealings with Kabréga I have found him trustworthy and obliging.

Dr. Junker writes to me that he forwarded his letters from Kabréga to Ugánda on February 12, and that he has also written to you. I gave him a small packet of letters for the English Consul-General at Zanzibar, in which a couple of lines

were enclosed for you. I hope he has sent it on. Should you find time amidst your numerous occupations and engagements to send me a few words, I shall really be deeply grateful to you. I shall, of course, send these lines on the first opportunity to Ugánda, but will they ever reach you? The letter from Egypt is dated May 27, and Sir John Kirk's, July 18, 1885.

Added to my misgivings about my own men, who may place all kinds of difficulties in my way (not from ill-will, but from unfathomable and unconquerable stupidity), I have a foreboding that one of these fine days the Danagla will suddenly come down upon us in steamers, or that perhaps the statement of a girl in Ladó, quoted above, may be true, namely, that soldiers and Danagla have reached Ayák. It is certain that the latter will not leave us in peace, and equally certain that they will occupy these districts again as soon as possible. They have men and weapons enough now, and the resistance of the Negroes will soon be broken down if a thousand or two of such scoundrels appear well armed. Of course it would be best to expedite our retreat, but how am I to set about it? Even Junker advises me not to be in a hurry.

WÁDELAI, *April* 5, 1886.

The war in Unyóro has turned out to be more serious than we expected, and so Kabréga has put before Dr. Junker the alternatives of retiring with him, or starting off for Ugánda, where indeed he wanted to go. He chose the journey to Ugánda, and left Kabréga on February 2, taking a route more to the south than the ordinary one, in order to avoid the Wagánda army. My agent has retired to the lake, where he is waiting till the final retreat of the Wagánda permits him to join Kabréga again. The latter is said to have been hard pressed by the Wagánda, but has suffered no harm at present. I have, however, received no direct information from him for some time, and no reliance can be placed on the very contradictory reports spread about by the Negroes. In my opinion, it would be a good thing for us all if the arrogant Wagánda were thoroughly humbled for once. Mwánga seems to rival in capriciousness his father, Mtésa.

The situation in this country is still a very gloomy one. As I said before, the greater part of our people do not wish to retire from here. I expect a definite answer from Ladó by the middle of this month, and shall then be able to consider how I am to act. If I can only get the people to let the Egyptians retire, I am quite ready to remain myself.

April 20, 1886.

The steamer I expected has arrived, but has brought only unwelcome news. I have no information from the officers whom I sent to Ladó to explain the situation to the men there. But a private letter from an Egyptian official has reached me, containing, among other things, the following:—"The report that several officers are on their way here to make preparations for a movement to the south has caused great excitement, and the men have agreed among themselves not to go south, for, they say, the way to the seat of our Government does not run southwards, but through Ladó to Khartúm, and they would rather return to their homes than go to the south. But if they are forced to do so, they will seize all the arms and ammunition, kill any one who tries to stop them, and finally make their way homewards. All the men from here to Wádelai are unanimous, and should you still insist on the march to the south, I fear that not one of us will escape, neither you nor we. I beg you therefore to give up this plan, and instead to send boats to Khartúm to procure help from there. No one believes the news which comes from the south, but the men say, 'We had better remain here than let ourselves be sold to Kabréga;' and, had not the Major, Rihan Aga, held them in check, they might have rushed off to the south long ago, carried out their designs there, and then have gone to their homes through Wádelai." To explain this, I must tell you that about a month ago all the older corporals, &c., in Ladó, almost all of them men from Bornu, Adamawa, &c., conspired to kill all the officers, Sudānese, and others in the place, and establish a sort of free state. But an Egyptian officer heard of the plot, and informed his superiors of it, and the Major put the ringleaders in irons, releasing them,

however, without punishment a few days later—an act of clemency unsuited to these times. In Dufilé, also, a sergeant-major shot at his officer, but fortunately missed him.

All this may give you some little idea of the difficulties we have to contend with here. I am hourly expecting to hear that open rebellion has broken out in Ladó, and then, of course, I shall go there.*

Messengers have come from Kabréga. This time the Wagánda have got a thrashing, and have therefore retreated. Kabréga complains bitterly that all the Zanzibar men settled in Ugánda came with the Wagánda to pillage his country. I am thinking of sending off Captain Casati to Kabréga soon to look after letters, and then he shall take this long letter with him. No news had come from Dr. Junker, probably because of the war, but I am expecting men from Kabréga again within the next few days, and then I shall probably hear from Junker also. Smallpox has been raging among us in Wádelai for the last three months; it is rather mild as a rule, but does not die out. Rain is wanted, too, and the glowing heat at midday makes even robust people dreadfully languid.

May 15, 1886.

Captain Casati sets out early to-morrow morning, and will stay with Kabréga for the present to forward letters to Ugánda and Zanzibar. Perhaps Mr. Mackay will be so good as to give us news of what is going on in Europe. I am sending off all my despatches this time, and I have enough faith in my good fortune to hope that means of forwarding them will ultimately be found. I had news indirectly from Kabréga's country yesterday. The war is over, and the Wagánda have taken their thrashing in silence for once. The smallpox, which is raging there likewise, *i.e.*, in Unyóro, may also have had a depressing effect on them. Kabréga has sent word to my agent, who is

* It may not be clear to all why Emin still remained at Wádelai while he was so anxious as to the action his men would take at Ladó. He was obliged to remain in the south to open up and maintain his communication with Kabréga, as that ruler would only treat with Emin personally. He did subsequently return to Ladó, and withdrew the troops, but the letter explaining this journey has not come to hand.—R. W. F.

now in Mahagi, that he may return to him. It is clear, then, that all is quiet there, and so the Arab merchants will soon again be passing along the roads between Ugánda and Unyóro. I will even try to get some small boxes of specimens conveyed to Sir John Kirk, though most of the rare ones from Monbuttu must remain here for the present. If those I send arrive safely, some light and beautiful things shall follow for you and the Leipzig people. Junker's collections are in Ladó; not a word has been heard of him, and I do not even know if he has arrived safely in Ugánda.

We are just as we were. The men will not move, and the few who are inclined to make the journey dare not speak their minds. Moreover, the disagreement between the Sudānese and Egyptians becomes more marked every day, and hatred of the latter is openly expressed, only a few of them who enjoy a fairly good reputation being spared. This is certainly not undeserved, for the Egyptian gentlemen have always treated the Sudānese *en canaille*, in spite of all my warnings, but now the tables are turned. I endeavour to mediate as much as possible; but can this go on long? I have made a fresh attempt to bring the men to reason; if this too fails, I must resign myself to circumstances, and preserve the show of authority which I still possess as long as I can. If the worst comes to the worst, the only thing I can do will be to put the reins into the hands of the oldest Sudānese officer, withdraw, if possible, to Kabréga's, and wait there until the men have recovered their senses and will follow me—for follow me they will sooner or later. In any case, I will let the Government know by this post all that is going on here.

I believe, if I may give my candid opinion, that the Government would act wisely if they paid the men and let them go their own way, or handed them over to Said Bargash. Every officer and private soldier has his house full of people. You know how they live here, and if this troop actually went to Egypt, or even to Zanzibar, there would be no end to the outcry and scandal about slaves, &c. Besides, as I have already hinted, strict discipline is not to be thought of with such soldiers and officers, and therefore Egypt would gain nothing by them, but would increase its budget to no purpose. The few old rifles

and other things which would be lost should really not be considered.

But it is possible that the dispute now existing may be settled in a very simple manner. I heard by the last post that some soldiers, natives of Makraká, have taken their rifles and gone away, under the pretence that their rations were not sufficient. Such examples are infectious, and as more than half of our soldiers are natives of the same place, I should not wonder if a large part of them follow those who have already gone. Indeed, as a strong party among the officers in Ladó, including some who are natives of these districts, have long been pleading in favour of a retreat to Makraká, I should not be at all surprised to hear some day that they had put their heads together and all marched off to Makraká without informing me of their intention. Certainly a struggle would then take place, for I believe that a large number of the older corporals, who are personally attached to me, would not follow without compulsion, and the collision caused by this circumstance might lead to serious results. However that may be, everything must shortly be decided, and should I live I will not fail to send you further reports. At present my aim is to make you acquainted with the situation, even at the risk of wearying you with all my words. So pray excuse and pardon me for taking up your valuable time.

7. Letters to Dr. R. W. Felkin.

PROSPECTS OF RELIEF—SUPPRESSION OF THE SLAVE-TRADE—DISCOVERY OF THE DUÉRU RIVER—FAITHFUL UNTO DEATH.

Wádelai, *July* 22, 1886.

I am still waiting and hoping for help, and that from England, whose philanthropic spirit will, I hope, keep her true to her ancient traditions, notwithstanding the rise and fall of Governments. I still believe that, whether Liberals or Conservatives are at the helm, the immense importance of aiding

us will not be lost sight of, nor the importance of crushing the slave-trade and of keeping my people free. One or two caravans are all that is necessary, and I believe they could easily reach me from the east coast direct, or from the north-east corner of the Victoria Nyanza. There remains, too, the route through Usóga and the Lángo district. I am of opinion, however, that a good present would smooth all difficulties there; and it must not be forgotten that if I knew that help was coming to me from that direction, I could easily push forward one or more stations towards the east, and thus stretch out a helping hand to any caravan coming to my relief.

WÁDELAI, *October* 2, 1886.

DEAR FRIEND,—Your letter dated May 10, 1885, arrived, together with one from Miss Felkin, dated September 25, 1885, and I do not know how to thank you enough for still bearing me in remembrance at a time when all my other friends appear to have thought me dead. Your letters were the first lines I received from Europe after three years and a half of absolute isolation. May the Almighty reward you abundantly for all the joy which your lines of affection gave me! . . .

How much the deaths of Gordon and of my old friend Hansal have grieved me I need hardly tell you. What will have become of Hansal's poor children, I wonder? . . .

We have heard a report that Dr. Fischer has arrived at the north-east corner of the Victoria Nyanza, and that Kabréga has sent some people to him to try and guide him to us. . . .

Now that the way to Ugánda is at last open, owing to the kindness of Mr. Mackay,* I hope that correspondence will

* Mr. A. M. Mackay went out with the first Church Missionary Society expedition to Ugánda in 1875. After much illness and many hardships, he reached his destination in 1878. He has remained at his post with wonderful tenacity until quite recently, having held his own against Moslem intrigue, the suspicion and ill-treatment of both Mtésa and Mwánga, and the vicissitudes of the climate. It was due to his influence and self-denying efforts that Emin Pasha was at last enabled to enter once more into communication with Europe. He also sent some supplies, and was the means of obtaining Mwánga's consent for Dr. Junker to pass through Ugánda to Zanzibar, and for the caravan of goods purchased by Dr. Junker to be sent to Emin. Emin again and again expresses the gratitude he feels to Mr. Mackay for all the risks he ran in aiding him.—R. W. F.

be carried on with less difficulty than hitherto. What has become of Dr. Lenz? I have heard nothing about him. Perhaps it is because I have been temporarily obliged to abandon the Monbuttu district. . . .

I wrote you in a former letter that I had made up my mind to hold on here, and explained to you fully in that letter my reasons for so doing, and my hopes and plans for the future of this land. I repeat what I then said; I shall remain here, and hold together as long as possible the remnants of the work of the last ten years. If help comes to me from any side, so much the better; if not, at least I will fall on the field where my work has been accomplished. I am sorry to be obliged to contradict the opinion which Stanley and Schweinfurth have expressed, "that now the slave-dealers are overrunning this country, and that the Negroes have more to suffer than they used to have." Since the retreat of Keremallah and the destruction of himself and of all his people on the borders of Kordofan, everything has remained in perfect peace, and indeed the war has in some respects done good, for the whole of the Bahr-el-Ghazal district has been totally freed from the slave-dealers, who, according to the above account, were said to be following unchecked their nefarious traffic. In the whole of the Bahr-el-Ghazal, I repeat, there is to-day no single Khartúmer remaining. It is true that a few of Lupton's old Negro soldiers are still there, but they are living peaceably with the natives. In my province I have only sixty-two Danagla left, and I am quite able to prevent them committing any excesses. The reoccupation of these districts, which have been temporarily given up, could be carried out with the greatest ease, and if we could only get a few caravans sent *viâ* Mombasa, Masai, Masala,* Wakori,† and from thence either here or to Kabréga, it would be all that we want. Naturally, the old Egyptian system of plunder must never be revived, but the natural resources of the land must be cultivated in a proper manner, and that too could easily be

* Masala was the farthest point reached by Thomson at the north-east corner of the Victoria Nyanza.

† The Wakori are a tribe through which Bishop Hannington passed. They inhabit a district on the northern shore of the Victoria Nyanza.—R. W. F.

accomplished—but who will help us? Will your merchants, indeed, wait until it is too late? The cardinal question at the present time is, in my opinion, not the reoccupation of the Sudān, and money and men sacrificed for deserts and sands, but that we should be supported, and our country prevented from relapsing into barbarism and the slave-trade. Into whosoever hands this country falls, the northern Sudān —that is to say, Khartúm, &c.—will naturally, after a time, give in its allegiance. But enough of this. You cannot think of the almost childish joy with which my people and I received the caravan from Ugánda. At the same time, we are certainly proud of the way in which we have been able to help ourselves whilst cut off from all external supplies. I send you a sample of the beautiful pocket-handkerchiefs we have made from cotton that we planted and spun ourselves. I hope, too, you will like the shoes. Instead of sugar we use honey; instead of coffee, the seeds of a species of Hibiscus; instead of stearine, candles made of wax; soap has been made from tallow and the ashes of various trees. With meat, a few vegetables and oil procured from the *semsem* seed have prevented us from starving. The tobacco we are growing now is very good. And then, think of the Temperance Question. If Sir Wilfrid Lawson could only see us, he would take the greatest pleasure in most of us. A hard time, truly, we have had, and yet the hard time has been of some good, for the old proverb, "Necessity is the mother of invention," has proved itself to be true even in our case. I am, notwithstanding, very thankful to God that the way to Ugánda does seem to be rather more open; and it is to be hoped that, with plenty of ivory, and with the help of Mr. Mackay's friendly services, I may be able to get enough cloth, &c., to clothe the wives and children of my poor people respectably. They have stuck bravely to me, and deserve, indeed, the best government and help which could possibly be given them. . . .

And now I must end. All my people send you their hearty greetings. They remember you everywhere with affection.

WÂDELAI, *October* 26, 1886.

DEAR FRIEND,—Before Dr. Junker left Ugánda for the coast, he collected a caravan, after immense difficulty, and with the aid of Mr. Mackay of the Church Missionary Society, and gained permission from King Mwánga to send it here. Besides a good quantity of cloth, there were many presents from themselves, as well as newspapers from 1884 to 1886, a few books, *Graphics*, and—what pleased me most and will prove most valuable—a good many numbers of *Nature;* so that at last I am permitted once more to see what is taking place in the scientific world. I see with deep sorrow that many of my old friends have gone before me to their last rest—Marno, Hansal, Dr. Behm, Dr. Nachtigal—all are no more. I am now almost the last of those who knew the Sudān; most of my friends have gone to rest, having finished their fight—whilst I——? In one of your former letters you ask me to send one of my papers to be published in England, so I send you the enclosed paper, which you can publish where you like.* It is an account of a tour to the Albert Nyanza, which I wrote on purpose for you. You must excuse its many faults, but the circumstances under which it was composed will, I hope, be sufficient explanation of its shortcomings. Since I wrote it, I have made two other excursions to the lake, and have gathered a considerable amount of fresh details. I might perhaps send at once the detailed map which I have drawn up, but as there are several points which I should like to clear up more fully, I will wait a while, and only give you, in the meantime, the chief result of my work, which is the discovery of a new river flowing from the Usongora mountains. It is of considerable size, and flows into the lake at the south. The river, which is called Kakibi by the Wasongora, and Duéru by the Wamboga, contains a large island near its junction with the lake. On account of numerous cataracts, however, it is very difficult to navigate; but, on the other hand, it pours into the lake throughout the whole year a large volume of water. The town of Hamgurko is situated on its banks, at a short distance from the lake, and a considerable

* See page 162.

quantity of salt of a superior quality is found there. The Kakibi or Duéru forms the boundary between the Muēnge district of Unyóro, which lies to the east, and the country of Mboga, lying to the west. Mbóga is inhabited by a people speaking a language which appears to be only a dialect of the Kinyóro. To the west-north-west and north, Mboga is bounded by Leundi, a country which lies behind the mountains bordering on the Albert Lake. To the west I found a country inhabited by tribes which I take to be Iddio (A-Zandē). I was told there was a large river to the south-west, on the banks of which there is a colony of Akka—called Balia by the Wanyóro. They, call themselves, however, in their own language, Betwa. I could give you a considerable amount of information concerning the light-coloured Wahuma from Mrūli, and the Toru mountains, and about the Wakonjo, &c., but, for the present, what I have said must suffice. As soon as I have another opportunity, I will send you full particulars on these subjects.

The zoological, and especially the zoo-geographical, results which I have obtained during the last few months will, I hope, be of considerable importance. I am sorry, however, that I have not the necessary text-books to help me to work out in detail all I have found.

By the same post I send to Professor Ratzel two papers for publication, and I have already sent to Gotha a complete map of my last Monbuttu journey, which will go to complete some of Junker's work. I have sent by the same opportunity one or two cases of preparations to England.*

WÁDELAI, *April* 17, 1887.

To-morrow morning I am sending a courier to Unyóro with letters for Mr. Mackay, and I take the opportunity of sending you a few lines. On the 9th of this month Mr. Mackay had the goodness to send me some English newspapers, from which I learn that it has been proposed to send us help. You can imagine yourself better than I can tell you that the heartfelt sympathy which has been expressed for me and my people in England, and the many friends we appear to have made, have

* These have been received at the British Museum.

given me extreme pleasure, and have richly repaid me for many of the sorrows and hardships I have undergone. I could never have believed that I, a stranger, and my poor people, could have received such generous thoughts, and that any one would be ready to make such sacrifices for us. If, however, the people in Great Britain think that as soon as Stanley or Thomson comes I shall return with them, they greatly err. I have passed twelve years of my life here, and would it be right of me to desert my post as soon as the opportunity for escape presented itself? I shall remain with my people until I see perfectly clearly that both their future and the future of our country is safe.

The work that Gordon paid for with his blood, I will strive to carry on, if not with his energy and genius, still according to his intentions and in his spirit. When my lamented chief placed the government of this country in my hands, he wrote to me:—"I appoint you for civilisation and progress' sake." I have done my best to justify the trust he had in me, and that I have to some extent been successful and have won the confidence of the natives is proved by the fact that I and my handful of people have held our own up to the present day in the midst of hundreds and thousands of natives. I remain here the last and only representative of Gordon's staff. It therefore falls to me, and is my bounden duty, to follow up the road he showed us. Sooner or later a bright future must dawn for these countries; sooner or later these people will be drawn into the circle of the ever-advancing civilised world. For twelve long years I have striven and toiled, and sown the seeds for future harvest—laid the foundation-stones for future buildings. Shall I now give up the work because a way may soon open to the coast? Never!

If England wishes really to help us, she must try, in the first place, to conclude some treaty with Ugánda and Unyóro, by which the condition of those countries may be improved both morally and politically. A safe road to the coast must be opened up, and one which shall not be at the mercy of the moods of childish kings or disreputable Arabs. This is all we want, and it is the only thing necessary to permit of the steady development of these countries. If we possessed it, we could

look the future hopefully in the face. May the near future bring the realisation of these certainly modest wishes, and may we be permitted, after all the trials which God has seen fit to bring us through, to see a time of peace and prosperity in Central Africa. You can imagine with what anxiety I look for the *dénouement* of things, and how I count the days which must still pass before I receive definite news. I thank God that I am still able to work and to keep my people well in hand. As long as I have plenty to occupy me, I seem to forget all trials, of which we have, unfortunately, only too many. I had only just returned here from Rejáf, when, owing to the stupidity of the Negroes living near this station in burning the grass during a gale of wind, the flames spread, and Wádelai was burned to the ground. With the help of the neighbouring Negro chiefs, I have been able to rebuild the station, which is now much handsomer than before. It was only by tremendous exertions that we were able to save our arms and ammunition, but all else became a booty to the flames. It is true that we had not much to lose, but what little we had was very precious, and its loss all the more grievous.

Things go on with us in the same way as before. We sow, we reap, we spin, and live day after day as usual; but February was an unlucky month, for in nearly every station fires broke out. This was due to the exceptionally strong winds in that month, and to the carelessness of the natives in burning the grass. We have docked our steamers, and renewed them as much as possible; and, besides this, we have built several boats, so you see we have plenty to do. I have been obliged to evacuate Ladó, as it was impossible for me to supply the garrison there with corn; but, as a set-off to the loss of this station, I have been able to reoccupy the district of Makraká. At present, therefore, we occupy the whole of my former stations in Makraká: Rejáf, Bedén, Kíri, Muggi, Laboré, Khor Ayu, Dufilé, Fatiko, Fadibék, Wádelai, Songa, and Mahagi, nearly all the stations which were originally entrusted to me by General Gordon; and I intend and expect to keep them all. I should like here again to mention that if a relief expedition comes to us, I will on no account leave my people. We have passed through troublous times together, and I

consider it would be a shameful act on my part were I to desert them. They are, notwithstanding all their hardships, brave and good, with the exception of the Egyptians. We have known each other many years, and I do not think it would be easy at present for a stranger to take up my work and to win at once the confidence of the people. It is therefore out of the question for me to leave, so I shall remain. All we would ask England to do, is to bring about a better understanding with Ugánda, and to provide us with a free and safe way to the coast. This is all we want. Evacuate our territory? Certainly not!

DR. EMIN-BEY.

APPENDIX.

MAP OF THE EQUATORIAL PROVINCE.

THIS map is merely a sketch intended to illustrate the record of Dr. Emin's travels. The whole of the region to the west of the Nile is subject to very considerable changes. The routes, so carefully laid down by Dr. Schweinfurth, Dr. Junker, and a few other explorers, are dependent upon the Meshra-er-Rek and Wandi being placed correctly upon the map, but neither the latitudes, still less the longitudes, of these places have hitherto been satisfactorily determined. Lupton Bey's latitudes in the northern portion of the Bahr-el-Ghazal have established the general accuracy of Dr. Schweinfurth's itineraries, but they help us little towards placing the upper Welle-Makua in its correct position. It is to be hoped that Mr. Stanley's well-found expedition will furnish a few trustworthy positions, which will enable us to combine the vast mass of existing materials in a satisfactory manner.

The linguistic colouring of the map is based upon the vocabularies and other information furnished by Dr. Schweinfurth, Colonel Long, Heuglin, Marno, Dr. Felkin, Beltrame, Mitterutzner, Wakefield, and Emin Pasha. Very much remains to be done before our knowledge can be called satisfactory, especially as regards the many aboriginal tribes who have been subjected by the invading Zandē and Monbuttu. Dr. Junker will no doubt be able to clear up many doubtful points. In the meantime, two great facts stand out very distinctly, viz., the extension of the Dinka and their kin from the eastern shore of the Victoria Nyanza to the White Nile, and the proximity of tribes allied to the Masai (Wakuavi) to the upper Nile. That the Latúka, for instance, are the kinsmen of the Wakuavi is clearly proved by Emin Pasha's vocabularies. The Galla, too, have found a place upon our map; and it is just possible that their neighbours, the Girata, are Woratta or Dauro, whom d'Abbadie classes together with the Gebbero (Sidama) and Agau as

Hamites. The origin of the Wahúma is a problem still awaiting solution.

The inset map is intended to show the districts of the Equatorial Province as they existed about 1882. In the time of Gessi Pasha, the so-called Equatorial Provinces of Egypt included three distinct provinces, each governed by a *mudir*, viz., Bahr-el-Ghazal, under Gessi Pasha; Rōl, or Rumbēk, under Mula Effendi; and the Equatorial Province proper (Hat-el-Estiva), under Emin Effendi. When Gessi was recalled (in 1880), the districts of Monbuttu and Makraká were separated from Bahr-el-Ghazal, and, together with Rōl, joined to the Equatorial Province. Lupton Bey, believed to be still a prisoner at Khartúm, was appointed Governor of Bahr-el-Ghazal. At the time of its greatest extension, the Hat-el-Estiva included the following districts and stations:—

DISTRICT.	STATIONS.
RŌL . . .	Ayák (headquarters), Shambé, Bufi with Lēsi (Mvolo), Rumbēk with Gōk-el-Hassan, and dependencies.
BŌR . . .	Bōr and dependencies.
LADÓ . . .	Ladó (headquarters), Amadi with Sayadīn, Gondokóro, Rejaf, Bedén, with dependencies.
KÍRI . . .	Laboré (headquarters), Kíri, Muggi, Khor Ayu.
DUFILÉ . .	Dufilé (headquarters), Fatikó, Wádelai, Mahagi, and Songa (occupied 1887).
FAUVERA . .	Foda (headquarters), Fauvera, and dependencies.
FADIBÉK . .	Fajúlli (headquarters), Farajók, Fadibék, Fachér, Farchel, Lobbōr, and dependencies.
LATÚKA . .	Tárangole (headquarters), Obbo, Kuron, Marangole, and dependencies.
MAKRAKÁ .	Wandi (headquarters), Kabayendi, Kudurma, Ombamba, Gosa, Mundú, Lógo, Tambira, Kalika (Kibi), Korobék, and dependencies.
MONBUTTU . (Gurguru).	Mbaga (headquarters), Gango, Kúbi, Tingazi, Gadda (Bellima), Dongu, and dependencies.

In consequence of the revolt of the Dinka and the advent of emissaries of the Mahdi, Dr. Emin was compelled to abandon the districts of Rōl and Makraká, and to withdraw from some of the outlying stations. Recently, however, some of the ground lost has been recovered, and in April 1887 the whole of Makraká had been reoccupied, and the following stations were still held, viz., Rejaf and Bedén in the district of Ladó; Kíri, Muggi, Laboré, and Khor

Ayu in the district of Kíri; Dufilé, Fatikó, Wádelai, Mahagi, and Songa in the district of Dufilé; and Fadibék.

Emin Pasha's original maps have been published in "Petermann's Mitteilungen," and nearly all the names given in this volume will be found on sheets 1, 2, 7, and 8 of my Map of Eastern Equatorial Africa, published by the Royal Geographical Society.—E. G. R.

BIOGRAPHICAL.

MTÉSA.—Mtésa was first heard of in Europe from Speke and Grant, who visited Ugánda in 1862. He professed to trace back his descent to Kintu (or Ham), the founder of the dynasty. When I visited him in 1879 he was about forty-five years of age, a splendid man, some six feet high, well formed and strongly built. He had an oval face, and his features were well cut. He had large mild eyes, but if roused by anger or mirth they were lit up by a dangerous fire. He had lost the pure Mhuma features through admixture of Negro blood, but still retained sufficient characteristics of that tribe to prevent all doubt as to his origin. All his movements were very graceful; his hands were slender, well-formed, and supple; he was generally dressed in a simple white Arab *kuftan*. It is somewhat difficult to describe his character; he was intensely proud, very egotistical, and until near the end of his life he thought himself to be the greatest king on earth. In his youth, and in fact until 1878, there is no doubt that he was very cruel, but an illness from which he suffered certainly softened him. His chiefs often said to me, "Ah, if Mtésa were well, there would be plenty of executions." It has been said that he was extremely changeable and fickle, and to superficial observers he was so; that is to say, as far as his intercourse with Europeans went. If, however, one looks a little deeper into his character, one finds that his apparent vacillation was overruled by a fixed idea, which was to benefit his people, increase his own importance, and to get as much as possible out of the strangers who visited his court. This explains his being one day a friend to the Arabs, on another to the Protestants, and on a third to the Catholics. A new-comer, especially if he had a large caravan, was always the favourite of the hour. It is not difficult for any one to enter Ugánda, but to get away again is no easy task, unless one is going for a fresh supply of goods. Mtésa liked Europeans and Arabs to be present at his court; it gave him prestige, and he also

wished his people to learn as much as they could from the white men, for he well knew and appreciated their superior knowledge. In manner he was courteous and gentlemanly, and he could order any one off to execution with a smile on his countenance. His mental capacity was of a very high order. He was shrewd and intelligent; he could read and write Arabic, and could speak several native languages. He had a splendid memory, and enjoyed a good argument very keenly. If he could only get Protestants, Catholics, and Arabs to join in a discussion before him, he was in his element, and although apparently siding with one or other, who might happen to be at the time in his especial favour, he took good care to maintain his own ground, and I do not believe that he ever really gave up the least bit of his belief in his old Pagan ideas. While too shrewd and intelligent to believe in the grosser superstitions which find credit among his people, he was yet so superstitious that if he dreamt of any of the gods of his country he believed it to be an ill omen, and offered human sacrifices to appease the anger of the offended deity. Shortly after I left Ugánda, he dreamt of his father, and in consequence had five hundred people put to death. He also believed that if he dreamt of any living person it was a sign that they meditated treachery, and he condemned them forthwith to death. This supposed power of divination is said to be hereditary in the royal race. In concluding my remarks about Mtésa, I may say that he denied his Wahúma origin; not only, however, did his features betray him, but many of the traditions he held regarding his ancestors, especially his descent from Ham, point conclusively to an origin in the old Christianity of Abyssinia.

When I was in Ugánda, Mtésa had two or three hundred women always residing at his court. He did not know exactly how many wives he had, but said that they certainly numbered seven thousand. He had seventy sons and eighty-eight daughters.—R. W. F.

Mwanga.—Mwanga is the present king of Ugánda, having been chosen by the three hereditary chiefs at the death of his father, Mtésa, and it is certainly to be attributed to the influence of the missionaries in Ugánda, that the usual bloodshed which attends the succession to the throne in Ugánda did not take place. On ascending the throne he was about sixteen years of age, and up to that time had been a simple, harmless youth, but his high position soon turned his head, and he became suspicious, abominably cruel, and really brutal. He began to drink and to smoke *bang*, and up to the present time his rule has been characterised by tyranny and bloodshed far sur-

passing anything that happened in his father's time. Nor does he appear to possess those good characteristics which certainly caused his father to deserve a certain amount of respect. A number of Christians, Protestants and Catholics, have been tortured and burnt at the stake by his orders, and Bishop Hannington was murdered by his command at Lubwa, on the borders of Ugánda.—R. W. F.

KAMRASI.—He was the first king of Unyóro with whom Europeans came into contact; he was visited by Speke and Grant on the 9th of September 1862, at his residence (1° 37′ 43″ N. lat.), which was situated upon a low tongue of land lying between the Nile and Khor Kafu. His character was very mild, and he treated Speke and Grant well. He died in 1870. After a period of anarchy, in which one of his sons, Kabkamiro, was killed, he was succeeded by Kabréga, the present king of Unyóro.—RATZEL.

KABRÉGA, the king of Unyóro, son of Kamrasi. He received a very bad character from Sir Samuel Baker, who visited him in 1877. As will be seen from the text, Emin Pasha has a better opinion of him, and, indeed, it would appear that he inherits a milder temperament than the Wagánda rulers, for Speke contrasted Mtésa's cruelty with Kamrasi's mildness, and at the present time Emin experiences, on the one side, the brutality of Mwanga, Mtésa's son and heir, and the mild and friendly treatment of Kabréga. The Wanyóro are of opinion that they are descended from a more noble race than the Wagánda.—RATZEL.

ETHNOGRAPHICAL.

FOREIGNERS IN UGÁNDA.—Strangers travelling through the country, accompanied by an escort from the king, are always sure of obtaining good accommodation, as the escort goes to the best hut in the village, turns the inhabitants out, and takes possession of it for the time being. The people are, however, hospitable, and endeavour to make one as comfortable as circumstances will permit. Foreigners are not permitted to enter Ugánda without permission from the king; they are compelled to halt at the first village until it is granted. One or two of the king's pages, bearing a drum and flag as marks of authority, are usually sent with a requisite number of porters to transport the stranger and his goods to the capital; but it is not etiquette for this to be done rapidly, and circuitous routes are always chosen, the halts made being frequent and tantalising. The traveller is also constantly annoyed by the constant disputes

between his escort and the villagers, which sometimes end in blows, and it requires great tact on his part to keep the peace. The king's pages are overbearing, and treat the villagers abominably, requiring them to perform impossibilities, and beating them if they refuse. As a rule, if the villagers hear that the king's guests are coming, they leave their huts, preferring to lose their goods rather than be maltreated by the king's pages. On one occasion, when travelling with a very small escort, I nearly lost my life through their plundering propensities. The drummer, who marches at the head of the caravan, receives the head of any cow that may be killed for food on the march as a perquisite.—R. W. F.

Wahúma (Wawitu).—The Wahúma inhabit scattered villages throughout the whole of Ugánda. They number between 40,000 and 50,000. They are probably descended from the original inhabitants of Abyssinia, and there is no reasonable doubt but that the ancestors of the reigning families in Ugánda and Unyóro were Wahúma. Known by the name of Wahúma, Watusi, and Wawitu, they are found throughout the east of Africa from 2° N. to 7° S. lat. They are tall, of pure blood, with good-looking oval faces, thin lips, and straight noses. The women are particularly beautiful, and the Wagánda like to have them as wives, a very superior offspring resulting from such marriages. The Wahúma are everywhere herdsmen. They live principally on milk and meat, and seldom engage in agriculture. On account of this, it is impossible in Ugánda, where the Wahúma are despised, to induce a Wagánda to have anything to do with the breeding of cattle. The Wahúma do not mix with the tribes among whom they live; they have a language of their own and live in out-of-the-way villages.—R. W. F.

Bows and Arrows.—Emin Pasha supplies precise information on the weapons of the Akka and other tribes with whom he became acquainted. In connexion with this subject, a paper by Dr. Ratzel "On the Geographical Distribution of Bows and Arrows in Africa" (*Berichte d. Sächs. Ges. d. Wiss., Phil.-hist. Cl.*, 1887, pp. 232–252, map) will prove of interest.

Bark Cloth.—A species of fig (*Ficus lutea*), which grows abundantly throughout Ugánda, is the tree from which *mbugu* or bark cloth is procured. The bark is taken from young trees; two incisions are made round the trunk, a third, which is vertical, joining the other two. The bark is then stripped off and the outer surface carefully removed, after which it is laid on a smooth square block of wood and rapidly beaten, in time to a low chant, with heavy wooden mallets. These mallets have circular grooved

heads, which give to the bark a ribbed appearance like corduroy, and under their blows it quickly thins out like gold under the gold-beater's hammer. When the bark has been beaten out to the requisite thinness, it is hung up to dry, and afterwards any holes which may have been produced in the beating are neatly patched with the trimmings from the edges. The thread used for this purpose is made from the bark, or from the fibres of the plantain, and a long thorn is used for a needle; the sewing is remarkably neat. The *mbugu*, when new, is of a yellow-brown tint, resembling freshly tanned leather; some of the finer sorts, however, are of a dull brick-red colour. They vary very much in quality, some of the better kinds being beautifully soft, and these are procured chiefly from the Sesse group of islands. The principal fault of this cloth is that it soon decays if it gets wet. Sometimes the *mbugu* is dyed, generally black, or various patterns in black, red, and blue are printed on it. The tree from which the bark is removed is not killed by the operation; the wound is covered with banana leaves, which are bound closely round it, and in process of time new bark grows. A considerable number of people are employed in this manufacture; the women strip the bark from the trees and do any repairing to the cloth that is necessary, but men beat out the bark and make the cloth.—R. W. F.

Beverages.—Brewing is extensively carried on in Ugánda, as the Wagánda have an inveterate objection to drinking water, and many of them boast that from early childhood water has never passed their lips. Almost every one knows how to manufacture some kind of drink, and men and women, boys and girls, alike engage in this occupation. Two kinds of wine and two kinds of beer are manufactured:—*Mubisi*, called *sandi* in Unyóro, is fresh banana wine, which is a perfectly teetotal drink; *mwênge*, an intoxicating banana wine; *mlamba*, a non-intoxicating beer made of banana juice, with a small quantity of boiled millet seed; and *malwa*, which has a greater quantity of millet seed added, and is very inebriating.

The Arabs have introduced the manufacture of spirits from *mwênge*, and distil a liquor from it which contains a very high percentage of alcohol.

The *mubisi* is made as follows:—A large hole is dug in the ground; it is lined with banana leaves, filled with green bananas, and covered over until the fruit is quite ripe. The bananas are then peeled, and mashed with fine dried grass in a large wooden boat-shaped trough, having a funnel end; a little water is added; the whole is mixed up either by the hand or with short wooden

sticks; the trough is then covered with banana leaves, and the mixture allowed to stand for an hour or two. It is then taken out, and the liquor strained through sieves made of grass into large bottle gourds, being then ready for use, and forming a sweet, non-intoxicating, pleasant drink.

To make *mwênge*, the above decoction is set aside for three days, when it ferments and becomes a slightly acid and refreshing drink, but it is very inebriating. *Malwa* and *mlamba* are made by simply adding a definite quantity of boiled millet seed to the *mubisi*, setting it aside in large earthenware jars, and stirring it from time to time for two or three days. No substances are added to any of these drinks to change their flavour.

These drinks are never stored; they are made as required, and consumed by the evening of the fourth day. If the *mwênge* be bottled and kept in a cool place for a couple of months, it tastes very much like champagne.

Mrisa is a drink made from durrah; it is largely used throughout the whole of the Egyptian Sudān. The grain is allowed to ferment, the liquor is then boiled and cooled, and set aside for two days before use.—R. W. F.

MADINDA.—This instrument consists of twelve to twenty pieces of hard resonant wood, which are scooped out in the middle and laid upon two parallel logs. It has the greatest compass of any musical instrument in Ugánda. It is played by two performers, who squat on each side of it, and strike the logs with drumsticks. A chord of four notes can be played at once.—R. W. F.

MANGALA, also called *mweso*, is the only game, properly so called, which the Wagánda know. It is played by two people, upon an oblong board containing thirty-two holes in four rows of eight each, the players having a certain number of counters, which may be either stones, beads, or coffee-berries. Each player places a certain number of counters in his two rows of holes, and the game, which is a very complicated one, and requires a considerable amount of calculation, consists in trying to obtain all the stones belonging to the opposite player. The counters are redistributed in turn, and on stopping at a hole, a player may, under certain conditions, take the opponent's counters out of the two holes opposite. It is a most fascinating game, and the people will sit for hours playing at it. It is so difficult, however, that I was not able to learn how to play it myself. It is probably not a native game, but may have been introduced from the east coast, where a somewhat similar game called *Bao* is played by the Arabs and the Suaheli.—R. W. F.

ORNITHOLOGY.

CERTHIA.—This supposed Certhia or creeper is among the most interesting birds discovered by Emin Pasha. It is the third species of a genus, of which *Salpornis spilonota*, a rare bird of Central India, is the type. A second species (*S. Salvadorii*) has been found in Benguella. The species discovered by Emin Pasha has been described by me under the name of *S. Emini*, Hartl.—HARTLAUB.

CORYTHAIX.—Emin Pasha names this genus in proof of Monbuttu being linked to the fauna of tropical Western Africa. It should, however, be observed that two fine species (*Corythaix leucotis* and *C. leucolophus*) represent this genus in North-eastern Africa, and that several other species, most of which have been discovered only recently, are met with in Eastern Africa.—HARTLAUB.

BIRDS OF MONBUTTU.—The species referred to on p. 314 remain doubtful until their skins shall have been examined. This applies more especially to Turacus, which Emin Pasha was not able to compare with specimens obtained farther west, as also to his species of a Corythaix, which is hardly identical with Linné's *Corythaix persa*. The Musophaga n. sp. is undoubtedly *Musophaga Rossæ*, Gould, which is numerously represented in the collection which Bohndorff brought home from the Nyam-Nyam country. I learn from letters written in April 1887 that Emin Pasha had not then been able to forward the Monbuttu birds intended for me.—HARTLAUB.

PASSER DOMESTICUS (p. 303).—This bird is identical with Brehm's *Passer rufidorsalis* (Speng, *Zoolog. Jahrbücher*, ii. p. 325).

PICUS.—The species of this bird which Dr. Emin describes as being nearly related to *Picus schœnsis* is that bird itself. Two specimens from Okkela are in the Bremen Museum.—HARTLAUB.

POGONORHYNCHUS (p. 262).—No bird named *Bessornis Rolleti* exists. There are only two specimens named after Rollet, namely, *Pogonorhynchus Rolleti* and *Oriolus Rolleti*, Salvad. The bird described by Dr. Emin as "beautiful" is probably a Pogonorhynchus. This is, however, doubtful, for Dr. Emin has sent specimens of both birds, which may consequently both occur in the same locality.—HARTLAUB.

BOTANY.

"GALLERY FOREST," a descriptive term first introduced by Dr. Schweinfurth. See "The Heart of Africa," i. pp. 504, 506; ii. p. 166. —RATZEL.

PENSTEMON.—This plant is not found on the upper Nile. Dr. Emin probably mistook it for one of the abundant *Scrophulariaceæ* with bright blossoms, such as Striga, Sopubia, &c.—SCHWEINFURTH.

MIMOSAS.—Only one species of this genus exists in the region under consideration. Dr. Emin, when using this term, evidently refers to acacias, of which there are many shrubs and trees.—SCHWEINFURTH.

MISCELLANEOUS.

STATIONS.—These are military stations or forts. Each station is fortified, either by earthworks or strong stockades, and each possesses several gates, which remain open from 6 A.M. till 8 P.M., and at which sentries are mounted night and day. From sunset to sunrise no gun may be fired off in or near a station, except as a signal of alarm. At 5.30 A.M. the *reveille* is sounded, and soon after the signal, "Light your fires." At 6 A.M. the roll is called and the gates opened; the soldiers drill, and the women begin to sweep the streets. At 8.30 all excepting the sentries turn out to work in the fields, to draw water, or to fetch wood; the dew being by that time dried up, the cattle are sent out to graze. Work lasts till 11.30, when there is an interval for rest till 2.30 P.M. It then continues till 5 P.M., when all return inside the fort. At 8 P.M. the roll is called, the gates shut, and at 9 P.M. all fires are extinguished, an officer going the rounds to see that this regulation is obeyed. The orders are most strict with regard to fire. Should a strong wind arise during the day, the bugle sounds "fires out," and any one not promptly conforming to the rule is severely punished. This is a very necessary precaution, as, if a hut catches fire, it is with difficulty that the whole station is saved from destruction. In the spring of 1878 Ladó itself was burned down, and the immense stores which Baker Pasha had taken to the province were all destroyed. It was owing to these precautions being omitted that Wádelai and several other stations were completely burned to the ground in 1887.—R. W. F.

LATERITE.—The "bog iron ore" and "ferruginous clay" (clay ironstone) frequently mentioned by Dr. Emin appears to be laterite, the extension of which throughout the Congo region has recently been made known by Dr. Pechuel-Loesche and others. Specimens from the Congo agree with those obtained from the Bahr-el-Ghazal.—SCHWEINFURTH.

FAKĪ (*fakīr*, pl. *fukara*), literally a poor man, that is, a mendicant

monk, applied in the Sudān more especially to teachers of the Koran, and also to those who have learned to write.—SCHWEINFURTH.

MISSIONS.—A very brief note on the Christian Missions in or near the Equatorial Province may be interesting. In 1848 a mission was started in Khartúm under the leadership of Father Ryllo, who was accompanied by Knoblecher, Vinco, and Pedemonte. The first mission station on the White Nile was established at Ulibari, close to Gondokoro, in 1851, and in 1854 the "Holy Cross" mission station was founded not far from Abukuka, in the country of the Kich. For thirteen years the missionaries laboured and suffered, fifteen out of twenty of them died, and the mission was finally given up in 1862. We owe important geographical and linguistic work to these intrepid pioneers, especially to Morlang, Knoblecher, Beltrame, and Dorvak. With regard to their success as missionaries, less can be said, but they suffered so much from sickness that the wonder is they held on so long, and it must not be forgotten that they were pioneers, and that they had not the benefit of experience. The missionaries at Khartúm and El Obeid did good work, established schools, and met with no little success.

In 1876 the Church Missionary Society sent out a well-equipped party to Ugánda. In 1877 four of the party arrived at the south end of the Victoria Nyanza, one of whom, Dr. Smith, died there. Lieutenant Smith and the Rev. C. T. Wilson reached Ugánda, but the former was subsequently murdered, together with Mr. O'Neil, at Ukewere. A mission has existed in Uganda ever since 1877, and a number of missionaries have carried on the work in spite of great difficulties and hardships. Mr. A. M. Mackay has laboured there for ten years with the greatest perseverance and zeal. Much translation-work has been accomplished, and the Mission-school has been resorted to by large numbers, many of whom have become Christians.

After Mtésa's death, Mwanga, his successor, tortured and burnt many of the Christians, and ordered the murder of Bishop Hannington on the frontier; but, notwithstanding this, there are still about 45 communicants, 200 Protestant Christians, and 100 Catechumens.

In 1878 Roman Catholic missionaries also reached Ugánda, and have continued working there up to the present time. They have a school, and many of their pupils have suffered death on account of their Christianity; statistics are unavailable.—R. W. F.

INDEX AND GLOSSARY.

Latitude and longitude of each place are given in brackets.

ABBREVIATIONS.—*Mt.*, mountain ; *mts.*, mountains ; *vill.*, village ; *dist.*, district ; *sta.*, stations ; *zer.*, zeríba.

A-BABÚA, tribe (3° 30′ N. 25° 30′ E.), 405
Abaká, tribe (4° 40′ N. 29° 30′ E.), 381–385
Abanga, *see* Bamba
Abángminda, a Zandé tribe, 375
Abanya, hill (3° 27′ N. 32° 41′ E.), 247
Abárambo, tribe (3° 30′ N. 26° 45′ E.), 197, 203, 441
Abayo, mt. (3° 25′ N. 32° 42′ E.), 247, 248, 271
Abd-el-Kader Pasha, 441, 470, 434, 470
Abd-es-Sadik, his cruelty, 412
Abd-er-Rahman-bin-Abeid-bin-Hamis-el-Habeshi, 488, 489
Abd-es-Samat, Abdullahi Wod, a Dongolaui (nephew of Mohammed Abu-es-Samat, who in Schweinfurth's time owned Sabi and other stations in the Bahr-el-Ghazal), his cruelty, 383, 468, 471, 473–5
Abdullahi, *see* Abd-es-Samat
Abēr, swamp (6° 48′ N. 29° 25′ E.), 341
Abiaï, cattle zer. (6° 59′ N. 28° 59′ E.), 343, 344
Abisanga, or Mabisanga, tribe (3° 40′ N. 27° 30′ E.), 196, 203, 445
Ablenyim, mt. (3° 55′ N. 32° 47′ E.), 267
Abre, tribe of Monbuttu, 203
Abreal, dist. (7° N. 29° 55′ E.), 344
Abrus precatorius, L., a climbing plant, order Leguminosæ, 20, 225
Abu-es-Samat, *see* Abd-es-Samat
Abu Gurun, sta., *see* Dirar
Abukaya, tribe, divided into A. oizila (5° N. 30° E.), and A. oigiga (3° 50′ N. 29° 50′ E.), 365
Abure, vill. (4° 13′ 33° 7′), 240
Abu Sala, *see* Labilla
Abu Saud (son-in-law of Agād Ahmed Sheikh, a great ivory and slave trader. Baker wanted to hang him ("Ismaïlia," Index), but Gordon took him into favour. He died at Khartúm 1881), 432
Abutú, vill. (4° 18′ N. 30° 28′ E.), 370
Acacias, 3, 14, 107, 132, 301, 400
Acacia albida, Del., 239
—— campylacantha, 221, 239, 281
—— fistula (Um Sufura, of Arabs), 27 242, 281
—— gummifera, 281
—— mellifera, 167, 239
—— nilotica, 4, 435
Acanthus arboreus, Forsk. (order Acanthaceæ), 125, 380
Acclimatisation of plants, 417, 418, 422–424, 449, 457, 459, 460
Acclimatisation of animals, 389–390
Achatina zebra, a shell, 227
Actitis hypoleucos, sandpiper, 195
Adamawa, country (9° N. 13° E.), 500
Adders, 146
Adenia venenata, *see* Passion-flowers
Adenium speciosum, Fenzl, a bush, order Apocyneæ, 216, 300
Adodi, mt. (3° 31′ N. 32° 27′ E.), 267
Adōl, mt. (6° 47′ N. 29° 28′ E.), 341
Aëdon, "warbler" (a bird), 226, 236
Ægialites pecuarius, a plover, 184
Æschynomene Schimperi, Hochst., the "solah" of India, a bushy tree, order Leguminosæ, 123
Afiati, vill. (6° 45′ N. 29° 36′ E.), 334
Afin, dist. (6° 38′ N. 29° 40′ E.), 334
Afzelia, order Leguminosæ, 107
Agapornis pullaria, L., a dwarf parrot, 353, 367, 385, 399, 404
Agār, Dinka tribe (6° 30′ N. 29° 40′ E.), 336–340, 475
Agaru, sta. (3° 52′ N. 33° 3′ E.), 245, 269, 295, 415
Agau (aboriginal tribes in Abyssinia), 512
Aggu (Aggo), mt. (3° 47′ N. 32° 40′ E.), 246, 254, 255
Agoro, vill. (3° 32′ N. 32° 40′ E.), 253, 268
Agudze, vill. (3° 44′ N. 32° 11′ E.), 263

Aguok, chief of Fadibék, 247, 269, 270
Ahmed Auat, sta. in Bahr-el-Ghazal, 469
Aire, river, *see* Yalo
Aje, a div. of the Lángo (3° N. 33° 45′ E.), 244, 252, 415
Akbaya, a div. of the Makraká, 376
Akka, dwarfish tribe, call themselves Batwa (1° 30′ N. 29° 30′ E. and elsewhere), physique, 316, 429; mode of life, 315; weapons, 194, 316; half-breeds, 316; native designations, 508
Akkara, country (3° 23′ N. 33° 10′ E.), 238, 249, 293
Akudeli, div. of the Makraká, 376
Akuero, mt. (3° 52′ N. 32° 37′ E.), 254, 255
Alare, khor (3° 55′ N. 33° 37′ E.), 242
Albert Lake (Mwuatan Nzigé), navigation, 14, 147, 162; depth, 148, 157, 159; saltness, 184; origin, 171; sea-sick, 184
Albinos in Unyóro, 64, 447
Albizzia serico-cephalus, a mimosa-like tree, order Leguminosæ, 106
Alel Kuimba, a forge (6° 50′ N. 29° 4′ E.), 345
Aliagar, hill (3° 45′ N. 32° 30′ E.), 255
Allo, khor (mouth 50° 16′ N. 29° 42′ E.), 387
Aloës, 37, 137, 183, 161, 360; used in incantations, 149
Aluganya sta. (4° 45′ N. 30° 8′ E.), 387
Aluri, tribe, *see* Lúr
Alwaj (Elwaj), *see* Waj
Amadi, sta. (5° 33′ N. 30° 21′ E.), its Danagla despots, and statistics of population, 311–312, 409; defence, 471, 473–6, 479–80, 486; also 355
Amadina, "wax-bill," a bird, 34
Amara or Uamara (Eastern Usóga?), 97
Amaranthus (caudata?), 25, 48, 148, 372, 459
Ambaj (Herminiera), 11, 12, 436
Ambereko, vill. (5° N. 29° 33′ E.), 384, 385
Amblyospiza, a bird, 200
Amok, khor (3° 52′ N. 33° 3′ E.), 243
Amomum (genus of the order Scitamineæ), 106, 125, 199, 268, 277 (native names), 362, 423 (use of its seeds)
Ampularia Wernei, a plant, 279
Amrupi, hot spring (3° 23′ N. 32° 12′ E.), 158
Amulets, in Beramese, 36
Anastomus lamelligerus, a stork, 162, 166
Andropogon sorghum, *see* Durrah
Anfina, chief of Magúngo, Shifalú, and part of the Lángo country, 21, 137 (a "gentleman"), 283–284 (reception, character); 472, 486
Anfina's island (Mukana), (2° 16′ N. 32° 17′ E.), 280
Angal, vill. (2° 10′ N. 30° 58′ E.), 151
Angræcum, a parasitical orchid, 125
Anje, khor (4° 34′ N. 29° 51′ E.), 371
Ankareb (Arabic), bedstead, 131
Anogeissus, silk-tree of Arabs, order Combretaceæ, 314, 384, 387, 399
Anomalurus orientalis, a flying squirrel, 200, 397
Anona, tree, 199 (fruit), 306, 362, 373, 399, 443
Anona senegalensis, "gourd-tree," 104 (northern limit)
Ansea, chief of Kanga (4° 42′ N. 29° 32 E.), 379, 382, 439
Ant-eaters, *see* Orycteropus
Antelopes, *see* Antilope, Tragelaphus, Hydrotragus
Anthistiria, a grass, 149, 182
Anthocleista, genus of the order Logoniaceæ, 195
Anthropoid apes, 399; *see* Chimpanzee and Masiki
Anthus, a pipit (bird), 183
Antilope (Kobus) ellipsiprymna, Ogylb, 101, 145
—— (Neotragus) Hemprichiana, Ehr. (Um-dikdik), 222
—— leucotis, Licht and Pet., 101, 130, 228
—— oreas, Pall., 36, 101, 222, 265
—— (Bubalis) senegalensis, H. Smith, 145
Ants (white, Termes bellicosus), 13, 24, 26, 80, 329, 343
Ants, red, 310
Anyisori, vill. (3° 48′ N. 32° 5′ E.), 262
Aoa, khor (4° 41′ N. 29° 22′ E.), 383
Aonix, a monkey, 399
Apagumba, a Zandē tribe, 375
Apes, anthropoid, *see* Masiki, Kinyabantu, and Chimpanzee
Aphrodisiac, 459
Apuddo, a division of the Mádi, within whose territory Sir S. Baker built "Ibrahimia" (3° 35′ N. 32° 10′ E.). The falls of the Nile below Dufilé named after it, 9
Aquila Wahlbergii, an eagle, 183
Arabs from Zanzibar, in Ugánda and Unyóro, 111, 113, 115, 116, 128, 132, 488
Arachys hypogæa, L., *see* Ground-nut
Arama, Gambari's brother (his vill., 2° 34′ N. 28° 22′ E.), 199, 446
Arda, Arab name for white ants or termites, 13
Ardea alba and comata, herons, 166, 144
Ardeb, a measure, holds about three bushels
Areda, mt. (3° 30′ N. 32° 5′), 255
Arenga, khor (3° 41′ N. 32° 57′ E.), 246, 295

Arise, khor (5° 35′ N. 30° 32′ E.), 310, 356
Aristida, a grass, 172, 176
Arita, khor (5° 22′ N. 30° 30′ E.), 356
Arju, mt. (3° 45′ N. 32° E.), 8, 9.
Artocarpus (bread fruit), 195 ; *see* Myrianthus
Arundo phragmitis, L., a reed, 12
Asa, khor (4° 33′ N. 29° 52′ E.), 379
Asala, hill (4° 52′ N. 29° 31′ E), 385
Asanga, Munza's brother, *see* Sanga
Ashe, Rev. Mr., 495
Asi, khor (3° 7′ N. 32° 5′ E.), 105, 106
Asplenium (furcatum, L. ?), a fern, 125
Assuan, vill., 463
Astrilda (Estrelda Astrild, L.), wax-bill finch, 34, 56
Astur metabates, goshawk, 258
—— polyzonus, many-banded goshawk, 142, 258
Asturinula monogrammica, Temm., a goshawk, 406
Asua, khor (mouth 3° 43′ N. 32° 2′ E.), 275, 277
Atappi, khor (mouth 3° 42′ N. 32° 5′ E.), 255, 262, 297
Atherura, Atherure, or tufted-tailed porcupine, 200, 396
Atikki, mt. (3° 58′ N. 31° 51′ E.), 260
Ato, mt. (2° 53′ N. 32° 30′ E.), 275, 276
Atoi, dist. (6° 42′ N. 29° 38′ E.), 334
Atot, *see* Atwot
Atrush's sta., on the Yei, 362, 374
Atwot (Atot), tribe (6° 20′ N. 30° 20′ E.), 321, 339, 342
Au, khor (4° 28′ N. 30° 15′ E.), 372
Aueri, vill. (2° 15′ N. 32° 17′ E.), 287
Aulacodus Swinderianus (a porcupine), 383
Avungodi, div. of the Makraká, 376
Awad-el-Kerim, chief of the Shukurie, 434
Ayak, sta. (6° 28′ N. 29° 43′ E.), 331 (slave-trade), 411 (statistics), 468, 471 (evacuation), 495
Ayell, dist. (6° 55′ N. 29° E.), 343
Ayi, river, Yei, or Rodi (mouth 7° 27′ N. 30° 45′ E.), native names, 314, 320 ; 317, 319, 320, 321 (lower course), 355 (at Amadi), 367, 443
Ayi, khor (4° 7′ N. 32° 29′ E.), 255, 256
Ayu, khor and sta. (3° 50′ N. 31° 55′ E.), 257

Babinge, rivulet (0° 26′ N. 32° 39′ E.), 47
Babites (a Mohammedan sect founded 1840–5 in Persia), 434
Baboons, geographical distribution, 57 ; in Lúr, 153, 156 ; also 224, 227, 334
Babukur, tribe (4° 50′ N., 29° E.), physique, 384 ; language, 384 ; huts, 384 ; cannibalism, 192 ; circumcision, 384
Badia, hill (4° 33′ N. 29° 52′ E.), 378
Badingo, dried bananas, 444
Baga, vill. (4° 41′ N. 29° 19′ E.), 383
Bagbe, chief (res. 3° 23′ N. 30° 53′ E.), 364
Bagger, khor (mouth 3° 12′ N. 32° 25′ E.), 246, 248, 252, 272, 273, 296
Baginmanya, vill. (4° 31′ N. 30° 16′ E.), 388
Baginze, mt. (4° 23′ N. 28° 53′ E.)
Bahr-el-Ghazal, province (*see* map) ; condition in 1882, 430 ; slavery, 421 ; revolt, 458, 462, 465, 505 ; evacuated by the Danagla, 486
Bahr-el-Jebel, physical features, 194, 398, 400, 453 ; ferry at Labóre, 258 ; ascent to Ladó, 436
Bahr-el-Zarafe (mouth 9° 23′ N. 31° 30′ E.), 222, 445, 454, 471, 488
Bakangai, Zandē chief (dead), resided 3° 1′ N. 26° 47′ E.
Bakara ("cow-keepers"), Arab tribe, 9° 20′ N. 27° E., and along White Nile, 433, 437
Baker, Sir Samuel, 22, 27, 50, 63, 96, 157
Balanites ægyptiaca, Del., tree, order Simarubeæ, 174, 182, 289, 291, 299, 400
Balearic cranes (Balearicæ), 292, 341, 345
Balia, Kinyóro name of Akka, 508
Balsamodendron, order Burseraceæ, 398
Bamba (Abangba of Zandē, or Mundu, 3° 20′ N. 28° 40′ E.), 192, 196, 205, 441 ; *see also* Babukur
Bamban, swamp (5° 1′ N. 31° 22′ E.), 302
Bamboos, 459 ; *see* Bambusa, Dendrocalamus
Bambusa arundinacea (bamboo), 419, 423
Bamia, Arabic for Hibiscus esculentus, (*q.v.*)
Bananas, in Ugánda, 38 ; in Mádi, 101, 193, 207, 399, 285, 444
Bandama, khor (mouth 4° 30′ N. 30° 20′ E.), 372, 389
Bang (hemp), smoked, 515
Bangajok, vill. (4° 32′ N. 32° 52′ E.), 235
Banjia, div. of the Zandē (4° 30′ N. 24° 30′ E.), 455
Bantu, family of tribes, northern boundary, 399
Bara, khor (3° 3′ N. 32° 30′ E.), 275
—— khor (5° 38′ N. 30° 22′ E.), 317
Barabra or Nubians, 433
Barbet, *see* Trachyphonus, Pogonorhynchus
Bari, dist. (3° 48′ N. 32° 5′ E.), 262

Bari, tribe (4° 30′ N. 32° E.), physique, 369; deformation of knees, 5; subdivisions, 369; villages, 217, 219, 290; dress, 5; agriculture, 291; tribal feuds, 217; colonies, 368, 374; revolt, 488, 490
Bark cloth, 40, 73, 81, 119, 120, 210, 517
Barra, khor (5° 38′ N. 30° 22′ E.), 317
Basingers (slaves trained to the use of arms), 409
Bassia Parkii, Hassk. (a butter-tree), 26, 300, 341, 350, 400
Batatas edulis, Choisy, *see* Sweet potatoes
Batn-el-Hajr, a dist. of Nubia (21° 20′ N.), 382
Bats, 43, 113; *see also* Xanthorpia
Batwa, *see* Akka
Bauru, vill. (6° 26′ N. 29° 20′ E.), 347
Baya, mt. (4° 35′ N. 33° 30′ E.), 241, 295
Bayango, mt. (4° 12′ N. 33° 10′ E.), 241, 294
Bayira, vill. (3° 2′ N. 32° 25′ E.), 107
Beans, 371; *see* Phaseolus
Bedén, sta., named after a chief (4° 35′ N. 31° 36′ E.), 3, 358
Bedmot, vill. (2° 7′ N. 32° 27′ E.), 283
Bee-eater, *see* Merops
Beef-eater, *see* Buphaga
Beetles, *see* Oryctes
Befo, a Bari chief, 215, 216, 470, 488
Beli, a tribe of Mittu (6° 20′ N. 29° 55′ E.), 342; tribal marks, 346; dress, 329, 346; pile dwellings, 329; villages, 346; fishing, 346; hunting-trophies, 349; dances and amusements, 348–350
Belinian (Bilingong), mt. (4° 56′ N. 31° 56′ E.), 215, 289
Bellima, Gambari's vill. (3° 10′ N. 28° 40′ E.), 191, 192, 194, 201, 438, 442, 444
Bĕr, tribe of Shúli (5° N. 32° 30′ E.), 221, 222, 229, 238, 291
Berr, khor (4° 57′ N. 31° 30′ E.), 301
Berri, vill. (5° 17′ N. 30° 44′ E.), 357
Beramese, dist. (0° 55′ N. 32° 30′ E.), 36
Beshir Salah, his misdeeds, 322
Bessornis Heuglinii (a chat), 227
—— Rolleti, *see* Pogonorhynchus
Betwa (Batwa), *see* Akka
Beverages, *see* Sandi, mwenge, mlamba, malva, mrisa, 518
Biayo, vill. (3° 5′ N. 32° 35′ E.) 241, 273
Bibia, khor (mouth 4° 46′ N. 30° 25′ E.), 361, 363
Bicher, khor (4° 40′ N. 32° 42′ E.), 231
Bilbo, a tick, 184
Billa, indiarubber plant, 347
Binza, Zandĕ chief (4° 30′ N. 27° 37′ E.)
Birds, migration of, 165
Birinji, a rebel, 469, 479
Biti, sta. (5° 38′ N. 30° 34′ E.), 311, 312
Biyerre (Aruwimi) (mouth 1° 10′ N. 23° 50′ E.), xxii
Bizelli or Kurnuk, sta. (7° 43′ N. 27° 43′ E.), 469
Bkámba, chief, in Unyóro, 58, 59
Blindi, vill. (1° 28′ N. 31° 35′ E.), 70
Blood-brotherhood in Unyóro, 77
Boars, 101, 228, 279
Bodio, Zandĕ chief (3° 53′ N. 29° 10′ E.), 452
Bogboro, stream (3° 14′ N. 28° 40′ E.), 190
Bog iron, 24, 188; *see* Laterite
Bognia, dist. (3° 25′ N. 34° 30′ E.), 252, 296, 415
Bohndorff, 452
Boiko (6° 14′ N. 28° 58′ E.), 471
Boki, chief of Fanyumori, 164, 165, 185, 487
Bombari, vill. (5° 50′ N. 31° 55′ E.), 228
Bombe or Bongbe, tribe of the Iddio division of the Zandĕ (4° N. 29′ E.), 192, 375, 473
Bomokandi, Nomayo or Mayo, river (source 2° 20′ N. 29° 30′ E.), 191, 405, 454, 447
Bondua, a division of the Makraká, 376
Bongbe, Zandĕ tribe, *see* Bombe
Bongere's vill. (3° 40′ N. 28° 56′ E.), 449, 451
Bongo or Dor, tribe (6° 30′ N. 28° 30 E.), 344, 430
Bongo or Labongo, dist. (3° 20′ N. 32° 35′ E.), 262
Bonjurem, mt. (4° 43′ N. 32° 3′ E.), 216
Bopara, swamp (4° 45′ N. 29° 45′ E.)
Bor, tribe, 6
Bor, sta. (6° 13′ N. 31° 44′ E.), road to Latúka, 228, 437, 470, 475, 477, 482, 487, 513
Bora, vill. (3° 3′ N. 31° 32′ E.), 12, 160
Borassus flabelliformis, *see* Doléb palm
Bori, vill. and mt. (5° 2′ N. 32° 30′ E.), 228
Bori, a Zandĕ chief, 445
Boron, mt. (4° 24′ N. 31° 25′ E.), 359
Bornu, country (12° N. 12° E.), 500
Bos bubalus, *see* Buffalo
Bostrychus sp., a beetle, 4
Boswellia papyracea, a stunted tree, yielding gum, 48, 218, 290, 358
Bote, tribe in Monbuttu, 203
Bova, mt. (0° 40′ N. 32° 32′ E.), 129, 130
Bows and arrows, 517
Brera, tribe of Mádi, on the Kibali, 365
Briaki, vill. (0° 47′ N. 32° 33′ E.), 130

Btenga, Gabla's native country, 283
Btobe, vill. (1° 40′ N. 31° 50′ E.), 71
Btuti, vill. (1° 25′ N. 32° 22′ E.), 29, 135
Bubo capensis (eagle owl), 366
Bubulcus ibis, Hasselq. (buff-backed heron), 215
Buceros cristatus, Rüpp. (crested hornbill), 399
Budytes flava, var. cinereocapilla, Sav. (yellow wagtail), 382; migration, 395
Buffaloes, 29, 100, 221, 222, 233, 363, 372, 391
Bufi, tribe (6° N. 30° 20′ E.), 319, 321
Bufi, sta. (6° N. 30° 20′ E.), 320, 410, 411, 468
Bugs, 104, 267
Bugoma, near Kibiro, 180
Bukrasa, vill. (0° 40′ N. 32° 35′ E.), 130
Bulbul (bird), *see* Pycnonotus
Buphaga erythrorhyncha, a beef-eater (bird), 245
Buteo augur, var. nigra, a buzzard, 184
Butterflies, *see* Eques
Butter-trees, 26, 153, 291, 300, 333, 341, 346, 350, 400; *see* Bassia and Stereospermum
Butyrospermum or Bassia, *see* Butter-trees
Buvuma, vill. (0° 35′ N. 32° 39′ E.). 129
Buzzards, *see* Circaëtus, Buteo, Poliornis
Bzággara, vill. (1° 2′ N. 32° 31′ E.)

Cabbages, 457
Caddis-fly, *see* Chrysopaperla
Cæsalpinias, 359
Calabashes, 276
Calamoherpe arundinacea, Gn., and C. palustris, Bechst. (reed-warblers), their migrations, 395
Calamus secundiflorus (a rattan), 160, 190, 381, 399, 423, 444; geographical distribution, 404
Calladias, shrubs, 125, 380
Calotropis procera, R. Br., plant, order Asclepiadaceæ, 8, 140, 162, 174, 242, 401
Camelopardalis, *see* Giraffe
Camels, 390, 415
Campephaga phœnicea, Sw., a bird ("caterpillar-eater"), 399
Canarium edule, Hk., *see* Mpafu-tree
Canavalia, order Leguminosæ, 101
Canna indica (seeds known as "Indian shots"), 42, 137, 372
Cannibalism, 192, 193, 206
—— in Unyóro, 77, 94
Caoutchouc, 199, 431, 443; *see also* Landolphia.
Capparidaceæ, order of plants (Caper family), 380
Caprimulgus inornatus, Heugl. (goat-sucker) 401
Capsicum conicum, *see* Pepper
Caracal, a lynx, 332
Carica Papaya, *see* Papaw-tree
Carissa, a tree, order Apocyneæ, 183
Carpodinus, plant yielding indiarubber, 314
Carrots, 457
Casati, Captain, 200, 459, 460, 473, 477, 482, 485, 501
Cassia sp. (senna), 157
Cat, domesticated, 80; wild, 228; *see also* Felis
Caterpillars, as food, 371
Cattle, in Unyóro, 59, 90; in Nyambara, 305; of the Shúli, 244; in Shifalú, 286; in Lúr, 150, 155; Bari, 289
Cattle disease in Latúka, 223
Centropus monachus, a lark-heeled cuckoo, 254
Cerambyx, a long-horned beetle, 146
Cercopithecus (a genus of monkeys), 387, 401
—— griseo-viridis, 54, 57, 136, 435
—— ruber, 57
—— sabæus, 57, 200
—— nov. sp. 57, 200
Certhia, 500; *see* Salpornis
Ceryle rudis (pied kingfisher), 144
Chad, lake (14° N. 14° E.), 405
Chalcites Clasii and Ch. cupreus (cuckoos), 227
Chameleons, 146
Chamma, mt. (4° N. 32° 30′ E.), 255
Charms, 47
Chat, *see* Thamorolæa, Bessornis
Cheetah (Cynailurus guttatus), 223, 265, 270
Chelidopteryx Riocourii (a hawk), 160
Chenalopex ægyptiacus (Egyptian goose), 166
Chimpanzee (Troglodytus niger), 56, 156, 200, 405; a fable, 96; presented with one, 355
Chinese labour, 416, 419
Chol, khor, or Lower Ginetti (*q. v.*)
Chongo, khor, or Upper Gulmar (6° 23′ N. 29° 28′ E.), 348
Chopi, the country of the Wachope or Shifalú (*q.v.*)
Chromis, a fish, 326
Chrysococcyx, Boddaert (Cuculus, Sharpe) a cuckoo, 394
Chrysopaperla (Caddis fly), 144
Chrysospiza lutea, Licht. (golden sparrow), 393
Chufal, mt., *see* Ekara
Chuki, khor (3° 39′ N. 32° 13′ E.), 265
Chulong, chief of Latúka, 222, 224

Churchur, ford (4° 26′ N. 32° 58′ E.), 239, 294
Cichladusa guttata, a bird, 227
Ciconia alba (common stork), 395
—— episcopus, 290
Cinchona (Peruvian bark), proposed introduction, 424
Circaëtus zonurus (a buzzard), 366
Circumcision, in Londú, 154; in Monbuttu, 212
Cisticola ladoensis (fantail warbler), 174
Citrons, 373, 389
Civets, 332
Clarias (the "sharmoot" of Egypt), a fish, 346
Clausilia (a univalve snail), 379
Clay, scented, 73
Cloth, *see* Bark cloth
Coal, in Monbuttu, 201
Coccinia, order Cucurbitaceæ, 75
Coffee, 77, 79, 118; Liberian, 424
Cola-nuts, 199, 207, 442
Coleus, order Labiatæ, 131
Colobus guereza, Rüpp. (Guereza monkey), 15, 54, 121, 155, 156, 226, 273, 380; geographical distribution, 57, 102
Colocasia (antiquorum ?), a tuber, order Araceæ, 36–38, 206, 286, 370, 376, 449
Colubridæ (Coluber serpents), 366
Combretum (order Combretaceæ), 65, 107, 139, 399
Coney, *see* Hyrax
Convolvulus, 131; *see also* Ipomœa
Coracias caudata, L. (lilac-breasted roller), 399
Corchorus, shrub (mlokhia of Arabs), 74, 320
Cormorant, 144; *see* Phalacrocorax
Corvus scapulatus (a raven), 25, 77
Coryphegnatus albifrons, a bird, 146
Corythaix (a plantain-eater), 200
—— leucolopha, 315
—— persa, 404, 520
Cosmetornis Spekii (night-jar), 43
Cotton, 320, 352, 368, 374, 388, 506
Cotton-tree, *see* Eriodendron
Coturnix communis (Harlequin quail), 333
—— Delegorguei, 157, 262, 333, 394
Cowrie shells, 15, 81, 114
Cows, *see* Cattle
Crab, *see* Telphusa
Crakes, *see* Crex, Ortygometra
Cranes, crowned, 233; *see also* Balearic cranes
Cratæva, a tree, order Capparidaceæ, 399
Crex pratensis, Becht (corn-crake), 395
Crinum (an umbellate bulbous lily), 137, 290
Crithagra chloropsis (a grosbeak), 402
—— leucopygia, 174, 302
—— musica, 146
Crocodiles, 127, 136, 159, 167, 228, 302
Cruciferæ (cressworts), 65, 363
Cuckoo, *see* Centropus, Chalcites, Chrysococcyx, Cuculus
Cuculus canorus, L. (common cuckoo), 395
—— capensis (Cape cuckoo), 227
Cucumbers, 12, 75, 260, 268, 276
Cucumis Tinneana (a cucumber), 326
Cucurbitaceæ, *see* Cucumbers
Cyanopica cyanea, Pall., and C. Cooki (magpies), 396
Cycnium (order Scrophulariaceæ), 110
Cynailurus guttatus, *see* Cheetah
Cynocephalus, *see* Baboon
Cyperaceæ (sedges), 276
Cyperus (sedge), 7
Cypselus (swift), 147

Dacelo chelicutensis (a kingfisher), 247
Dahabīye (Arabic), a passenger-boat, with sails and oars
Dalbergia, tree, 107, 301
—— melanoxylon, Perott, tree (supplies Senegal ebony), 81
Dallington, Stanley's servant, 47
Damur (coarse, hand-made cotton stuff), 386, 474
Dana, dist., near Labóre, 262
Danagla (plur. of Dongolaui, a native of Dongola, *see* p. 409); misrule, 408; robberies, 311, 308, 364, 384, 439, 465; in Monbuttu, 204; defeat in Nyambara, 301; malefactors captured by Negroes, 385; revolt, 466; retreat to north, 484, 486, 505
Dange, swamp (4° 15′ N. 30° 52′ E.), 370
Dar Abu Dinga (5° N. 25° E.), 405
Dar Mahas, in Nubia (20° N.), 382
Darter, *see* Plotus
Daso, vill. (5° 35′ N. 30° 30′ E.), 310
Date-palms, 53, 111, 281, 354, 363, 459, 444, 399
Datura (a thorn-apple), 173, 176
Deang, vill. (2° 9′ N. 32° 26′ E.), 137, 282
Debatu, vill. (0° 35′ N. 32° 37′ E.), 48
Debber, pool (6° 45′ N. 29° 7′ E.), 345
Debono, Andrea, 374
Dedde, khor (3° 25′ N. 32° 6′ E.), 111
Defa'allah, of Ayak, a rogue, 411, 412
Degea, vill. (0° 37′ N. 32° 40′ E.), 44
Deluru, khor (5° 37′ N. 29° 45′ E.), 353
Demba, vill. (2° 3′ N. 32° 28′ E.), 132
Dem Guju (7° 17′ N. 26° 25′ E.), 454

Dem Soliman (Suleiman), formerly known as Dem Zibēr (Zibēr's town), (7° 38′ N. 26° 32′ E.), 322, 451, 458, 470, 476
Dem Zibēr, *see* Dem Soliman
Dendrocalamus strictus (a bamboo), 423
Dendrocygna viduata, widow-duck, 249
Dentonj, Dinka chief, 495
Dereto, vill. (3° 57′ N. 32° 2′ E.), 257, 297
Derr, pariahs among the Agār, 339
Detarium, order Leguminosæ, 2, 292
Dibbi-tree, 385
Diendi, vill. (3° 22′ N. 32° 36′ E.), 272
Dinka tribe (*see* map), 437, 512 ; language and subdivisions, 339 ; agriculture, 345 ; revolt, 430, 450, 453, 457–8, 493 ; *see also* Agār
Dioscorea alata, *see* Yam
Diospyros mespiliformis, a fruit-tree, 165, 303, 325, 341, 358
Diptera (flies), 436
Dirar or Abuburun, sta. (7° 22′ N. 28° 25′ E.), 469
Diseases, 33, 94, 443, 501
Doggoru, zer. (7° 9′ N. 28° 38′ E.), 469
Doghúrguru, name of the Ayi at Bufi, 320
Dogovura, vill. (4° 4′ N. 32° 29′ E.), 255
Dogrupatara, hill (6° 2′ N. 23° 49′), 328
Dogs, 371 ; in Monbuttu, 188 ; in Morú, 314 ; in Shifalú, 286 ; in Unyóro, 80, 138, 173
Dojeri, chief, 329
Dokhn (Penicillaria Pluckетii), 302, 306, 307, 309
Dokolo, mt. (5° 29′ N. 29° 45′ E.), 353
Dokurru, wells (6° 19′ N. 29° 35′ E.), 349
Doléb palm (Borassus flabelliformis), 6, 11, 12, 15, 100, 107, 135, 138, 140, 157, 268, 281, 291, 294, 310, 311, 319, 342, 362, 399, 444 ; geographical dist., 11
Dolille Finnu, plateau (6° 23′ N. 29° 47′ E.), 330
Dolla, vill. (6° 17′ N. 29° 47′ E.), 329
Dombo, vill., 454
Domebra, pool (6° 13′ N. 29° 43′ E.), 350
Domi, mt. (3° 43′ N. 32° 9′ E.), 263, 265
Dongotola, mt. (4° 17′ N. 33° 12′ E.), 242, 292
Dongu, sta. and river (3° 54′ N. 29° 40′ E.), 201, 439, 450, 451
Donkeys, in Lúngo country, 391
Donvu, mt. (5° 40′ N. 30° 25′ E.), 355
Dore, khor (3° 12′ N. 32° 52′ E.), 249, 252 ; *see also* Mire
Dracæna (Dragon's blood tree), 37, 40, 58, 281
Dragon-fly, 302
Dragomans, freed slaves employed as police, 409
Dryoscopus nigerrimus, Reich. (a bush-shrike), 402
Dubenge, swamp (1° 7′ N. 32° 35′ E.), 30
Dubre, vill., 6° 24′ N. 29° 24′ E.), 348
Ducks, Turkish, 391
Duckweed, *see* Pistia
Duero, vill. (0° 48 N. 32° 35′ E.), 40.
Dueru, river (mouth 1° 20′ N. 30° 3′ E.), 167, 179, 507
Dufalla, governor of Ayak, 331
Dufilé, sta. (3° 35′ N. 32° 2′ E.), 10, 98, 140, 513
Dugfala, vill. (6° 24′ N. 29° 46′ E.), 330
Dugwara, dist. (6° 7′ N. 29° 53′ E.), 327
Duhuli, mt. (0° 42′ N. 32° 39′ E.), 42
Dum-palm (Hyphæne), southern limit, 240, 294, 401
Durrah (Andropogon Sorghum or Sorghum vulgare), 8, 75, 385, 388, 389
Dwarfs, reported, 3 ; *see* Akka
Dytiscus, a water-scorpion, 146

Eagle, *see* Aquila
Earth-eaters (the Lesi), 327, (Unyóro) 75
Earthquakes, 3, 5, 7, 177, 475
Earwigs (Forficula), 334
Echinops (a saline plant), 266, 363
Echis, a snake, 226
Edi, khor (4° 42′ N. 29° 32′ E.), 380
Egg-plant, *see* Solanum
Ekara, mt. (Chufal, Okirri, Mádi Peak, or Jebel Asal) (4° 16′ N. 32° 26′ E.), 234, 254–256, 292
Ekudeli, vill. (4° 24′ N. 30° 14′ E.), 372
Elais guineensis, *see* Oil-palm
Elanus melanopterus, Elanet, a hawk, 369
Elema, vill. (3° 23′ N. 32° 7′ E.), 157, 111
Elephant, legend (Unyóro), 96
Elephant-fly, 324
Elephants, 29, 74, 142, 221, 222, 263, 278, 286, 289, 310, 314, 317, 355, 359, 371, 389, 401
Elephants, Indian, in Africa, 390
Eleusine coracana, "talabún" of Arabs, a corn, 12, 74, 75, 100, 101, 142, 193, 206, 266, 277, 449
Elianga, vill. (4° 21′ N. 32° 59′ E.), 240, 294
Elminia Teresita, a bird, 366
Elyab, a Dinka tribe (6° 20′ N. 31° 40′ E.), 321
Emba, sta. (4° 40′ N. 30° 9′ E.), 374, 388
England, expected relief, 503, 509
Entada sudanica, a climbing shrub, order Leguminosæ, 53
—— sp., 318
Envamu, a nut, narcotic, 442

Equatorial Province, revenue, 421, 424; taxation, 437; mismanagement at Khartúm, 425; suggested reforms, 425, 431; districts, 513
Eques, a butterfly, 20, 325
Equus Burchelli, 401
—— zebra, 401, 403
Eragrostis, a grass, 123
Ergugu, khor (mouth 2° 26′ N. 32 °12′ E.), 36, 131, 134
Eriodendron, cotton-tree, 51, 275
Erra, khor (2° 9′ N. 31° 15′ E.), 149
Eruku, mt. (2° 10′ N. 31° 10′ E.), 148, 153, 157, 167
Etheria, an oyster, 344, 350
Eucalyptus, 418
Euchlæna luxurians (Guatemala grass), 418
Euphorbia candelabrum, 8, 162
—— tirucalli, 174
—— venefica, 43, 71, 346
Euphorbias, 14, 18, 28, 109, 132, 145, 158, 213, 220, 242, 281, 291, 295
Euplectes (widow-birds), 319, 394
—— flammiceps, 369
—— franciscanus (ignicolor), 302, 369
Eurostigma, a plant, 119
Eurystomus, roller (a bird), 394
Eyakke (4° 42′ N. 32° 43′ E.), 231
Eyupi, khor (mouth 3° 35′ N. 32° 2′ E.), 105, 106

FABO, vill. (3° 7′ N. 32° 5′ E.) 104, 144
Fabongo, vill. (2° 37′ N. 31° 30′ E.), 151, 162
Facher, mt. (3° 3′ N. 33° 13′), 252, 296
—— sta. (*ib.*) 429, 513
Fachora, vill. (2° 21′ N. 32° 21′ E.), 288
Fadibék, sta. (3° 31′ N. 32° 41′ E.), 247, 253, 267, 268, 296, 468
Fadiker, dist. (4° N. 32° 5′ E.), 257
Fadl Allah's station, now Embe (4° 40′ N. 30° 9′ E.), 374
Fadot, dist. (3° 33′ N. 32° 15′ E.), 265
Fagak (Fagaki), vill. (2° 58′ N. 31° 48′ E.), 144, 162
Fagango, on the Nile, above Wádelai, 491
Faggara, khor (3° 35′ N. 32° 38′ W.), 254
Fagger, vill. (4° 1′ N. 32° 5′ E.), 257, 297
Fagrinia, *see* Jeifi
Fajelú, district (4° 10′ N. 31° E.) 301, 369
—— tribe of the Bari, 359, 381
Fajulli, sta. (3° N. 32° 54′ E.), 250, 296, 415
Fakí (Fakír), explanation of words, 522
Fallibek, sta. (3° 27′ N. 32° 30′ E.), 267, 269
Falogga, vill. (3° 43′ N. 32° 54′ E.), 246, 295
Faloro, vill. (3° 13′ N. 31° 57′ E.), 100
Fandiker, vill. (4° 1′ N. 32° 6′ E.), 262, 297
Fanegoro, vill. (2° 25′ N. 31° 30′ E.), 151, 163
Fanioro, vill. (3° 25′ N. 32° 4′ E.), 99
Fannegai, dist. (6° 53′ N. 29° 12′ E.), 342
Fanto, vill. (3° 32′ N. 32° 22′ E.), 265, 266
Fanyiquara, dist. (4° 3′ N. 32° 8′ E.), 256, 262, 297
Fanyumori, vill. (2° 14′ N. 31° 22′ E.), 151, 163, 185
Faomo, vill. (3° 10′ N. 32° 2′ E.), 105
Faqueri, zer. (3° 5′ N. 32° 5′ E.), 106
Farabongo, mt. (3° 8′ N. 33° 19′ E.), 249, 272
Farajok, sta. (3° 40′ N. 32° 32′ E.), 254, 267, 297
Faranka, dist. (2° 50′ N. 32° 30′ E.)
Faratjell, or Farchel, sta. (2° 32′ N. 33° 17′ E.), 251, 513
Faroketo, dist. (2° 30′ N. 31° 30′ E.), 145, 151
Farshile, *see* Fashelu
Farukh (Arabic), gun-boy, p. 409, or a mercenary
Fashelu (Farshile, Baker's Ibrahimiya) (3° 35′ N. 32° 10′ E.), 255, 263, 264, 429
Fashoda, town (9° 55′ N. 32° 15′ E.), 71, 432, 433, 470, 485, 493
Fatanga, vill. (2° 45′ N. 33° 7′ E.), 259, 269
Fatiri, mt. (2° 35′ N. 32° 30′ E.), 279
Fatíko, sta. (3° 2′ N. 32° 20′ E.), 106, 109, 276
Fauvel, vill. (3° 5′ N. 32° 17′ E.), 109
Fauver (Fawor of our map, 7° 27′ N. 30° 45′ E.), 321
Fauvera, sta. (2° 12′ N. 32° 35′ E.), 137, 280, 281, 468
Fedwin, dist. (6° 50′ N. 29° 15′ E.), 342
Fejau, vill. (2° 10′ N. 31° 40′ E.), 139
Felis caligata (booted lynx), 223
—— caracal, L. (the Caracal), 332
—— maniculata, Rüpp. (Nubian cat), 382
—— Serval, Schreb. (bush cat of Cape), 223
Ferial, vill. (6° 32′ N. 29° 42′ E.), 333
Feriak, vill., near Bor, 228
Ferns, *see* Asplenium
Ficus (fig-tree), 40, 107, 314, 398, 418
Ficus glumosa, Deh., 119
—— fessoglensis, Ky., 119
—— lutea, 173, 517
Figs, 418
Filaria medinensis (Guinea-worm), 33, 347
Finches (Fringillidæ), 12, 13, 101, 300, 319; *see also* Habropyga, Astrilda, Ortygospiza, Sporothlastes, Pytelia, Pyrenestes, Spermestes, Uræginthus, Zonogastris

Fischer, Dr. G. A. (in 1882–83 he penetrated through the Masai country to Lake Naiwasha; in 1885–86 he led an expedition for the relief of Emin Pasha, but only reached Kavirond. He died Nov. 11, 1886), 494, 504
Fishes, migration of, 64, 170, 396; *see also* Aulacodus, Chromis, Clarias, Protopterus
Fishing, 14, 15, 175, 326
Fleas, 23
Flies (Diptera), 436
Fly-catcher, *see* Musicapa, Terpsiphone, Campephaga
Fodi (Foda), dist. and sta. (2° 15′ N. 32° 17′ E.), 286, 513
Foki, mt. (4° 3′ N. 31° 56′ E.), 260
Folk-lore, in Unyóro, 93–96
Foquate, dist. (2° 40′ N. 31° 28′ E.), 151
Fora, mt. (5° 19′ N. 30° 50′ E.), 357
Forests, geographical distribution of, 403
Forficula (earwig), 334
Fowls, 188, 286, 305, 314, 345, 371
Francolins, 273, 280, 310
Francolinus Grantei, Hartl., 399
Fringillidæ, *see* Finches
Frogs, 137, 228
Fukara, plural of fakīr (*q. v.*)
Funambulus (a squirrel), 227
Fundi, a freed slave
Fungi, 184, 310
Funotar, khor (3° 20′ N. 32° 43′ E.), 248

Gadaref (14° N. 35° 35′ E.), 373, 449
Gadda, river (mouth 3° 40′ N. 28° E.), 191, 445
Galago senegalensis (a Lemur), 200, 435
Gallabas (Jellabas), merchants, slave-dealers, 458, 481
"Gallery" woods, 22, 187, 188, 194, 379, 380, 444, 521
Gambalagala, country (0° 20′ N. 30° 20′ E.), 92
Gambari (a Monbuttu chief of Kubi, in Monbuttu, detained a prisoner during two years in the Bahr-el-Ghazal, until liberated by Emin Pasha), 204, 295, 315, 322, 445, 446
Gando, sta. (7° 40′ N. 27° E.), 458
Gangezi, dist. (1° 30′ N. 31° 45′ E.), 97
Gango, sta. (2° 45′ N. 29° 2′ E.), 191, 450
Gani, *i.e.*, country of the Wagani or Shúli, 97
Garagir, nickname of the Monbuttu, 212
Gardenias (order Rubiaceæ), 309, 350, 400
Gásaui, vill. (2° 6′ N. 32° 32′ E.), 282
Geese, 299, 345; *see* also Chenalopex, geese
Geisi, mt. (1° 59′ N. 31° 50′ E.), 138
Gel (lower Taffari, mouth 6° 28′ N. 31° 40′ E.), 307
Geli, khor (4° 15′ N. 30° 33′ E.), 368, 370
Gebbero (Sidama), people, in S. Abyssinia, 512
Genet, 200, 332
Georychus (mole-mouse), 328, 375
Gessi Pasha, 512
Ghatal, mt. (4° 21′ N. 33° 2′ E.), 240, 294
Ghattas, a Coptic merchant of Schweinfurth's time
Giegler Pasha, 433, 434, 457
Gikkor, hill (3° 6′ N. 33° 56′ E.), 250, 296
Gimiro's village (3° 2′ N. 32° 20′ E.), 109
Ginetti, Kanieti, or Chol, khor (4° 52′ N. 32° 33′ E.), 221, 222, 291
Gipsies in Unyóro, 40
Giraffes, 221, 222, 401, 403
Girata, tribe (5° N. 34° 50′ E.), 512
Goats, 138, 150, 152, 173, 226, 286, 371
Goatsucker (bird), *see* Caprimulgus
Goddu (4° 12′ N. 31° 6′ E.), 361
Gōk, tribe (7° N. 29° E.), 342
Gōk-el-Hassan (Lang, Defa'allah's or Sherifi's), sta. (7° 2′ N. 28° 57′ E.), history, 344, 453
Goll, the east arm of the Ayi, 321
Gollolindu (Mirshuk), khor (4° 45′ N. 32° 2′ E.), 216
Golunda pulchella (mouse), 367
Goma, mt. (3° 7′ N. 32° 39′ E.), 248, 273, 277
Gondokóro (4° 54′ N. 31° 49′ E.), 522; reoccupied 1878, 214, 483
Gonge, dist. (6° 8′ N. 30° 15′ E.), 321
Goose, knob-billed (Sarcidiornis melanotus), 233; *see also* Geese
Gordon Pasha, vii., 2, 25, 50, 269, 467, 482, 496, 504, 509
Gosa, sta. (5° 7′ N. 29° 36′ E.), 386
Goshawk (Astur polyzonus), 142; *see also* Astur, Asturinula, Melierax
Gourds, 40, 75; *see also* Helmia
Græculus, *see* Cormorant
Grant, Colonel, his botanical collection, 399
Grass-fires, 341, 351
Grasshoppers, 56, 276
Grewia mollis, a shrub, order Liliaceæ, 104, 182, 291
Grosbeak, *see* Crithagra
Ground-nut (Arachis hypogæa), 149, 326, 332, 352, 424
Guatemala grass, *see* Euchlæna
Guavas, 424, 457
Guereza (monkey), *see* Colobus
Gueri, sta. (6° 10′ N. 29° 44′ E.), 350
Guinea-fowl, 34
Guinea-worm, (Filaria medinensis), 33, 347
Gullo, khor (5° 32′ N. 30° 6′ E.), 354
Gulmar, khor, *see* Chongo

Gumbiri, sta. (4° 11′ N. 31° 4′ E.), 361
Gumrisi, a banana grove (2° 12′ N. 32° 27′ E.), 1
Gumro, dist. (6° 22′ N. 29° 20′ E.), 348
Gurguru, nickname of the Monbuttu, 513; Arab name of the mudirië of Rōl, 322
Gurken, mt. (6° 11′ N. 29° 49′ E.), 326, 328, 350
Guru, vill. (0° 51′ N. 32° 31′ E.), 37, 139
Gurud, khor (5° 33′ N. 30° 39′ E.), 310
Gynandropsis, plant, order Capparidaceæ, 145, 313, 320
Gypogeranus serpentarius (Secretary-bird), 402

Habropyga (a finch), 56
Hailstorm in Unyóro, 63
Halanga, mt. (3° 58′ N. 33° 5′ E.), 295, 242
Halcyon semicærulea (a kingfisher), 227, 245
—— senegalensis, 227
Haliaëtus vocifer (an osprey), 145, 280, 326, 343
Hamgurko, vill. (1° 10′ N. 30° 26′ E.), 179, 507
Hamis-bin-Holfán, 498
Hannington, Bishop, 516
Hansal, Consul, 496, 504
Hares, 61
Harogo, dist. (3° 40′ N. 34° 10′ E.), 241, 295
Hassán Aga, 479
—— Ajib (emissary of Keremallah), 475
—— Bey Ibrahim, 413
Hat-el-Istiva (Equatorial Province), *q. v.*
Hauchu, khor (4° 20′ N. 31° 27′ E.), 360
Harok, *see* Elanus, Chelidopteryx, Nisus,

Helmia bulbifera (a gourd), 74, 80, 266, 288, 365, 370, 449
Helotarsus ecaudatus, Daud. (a kite), 402
Hemipodé, *see* Turnix
Herminiera, *see* Ambaj
Herons, 289, 292, 144; *see also* Ardea, Bubulcus, Tantalus
Herpestes fasciatus (Zebra ichneumon), 332, 310
Heuglin, 398
Hexalobus (senegalensis), a tree, 399
Hibiscus (a mallow), 99, 101, 183
—— cannabinus, 266, 320
—— esculentus ("bamia") 149
—— Sabdariffa, 300, 349, 474, 506
Hicks, General, 463
Hides, how dressed, 81
Himantopus autumnalis, Hass. (a bird), 395
Hippopotamus, 12, 74, 77, 127, 136, 144, 162, 302, 327, 344
Hofrat-en-Nahas (8° 45′ N. 24° 5′ E.), 486
Holy Cross, miss. sta. (6° 46′ N. 31° 13′ E.), 522
Honey, 75, 283, 105, 268
Honey-guide, *see* Indicator
Hoopoe, *see* Irrisor, Upupa
Hoplopterus (speciosus), a plover, 300
Hornbill, *see* Buceros
Horo, khor (4° 33′ N. 29° 53′ E.), 378
Hot springs, 158; on Lake Albert (2° 5′ N. 31° 10′ E.), 158; on Asua river, 264; Labilla, 158; Rillek, 158; at Kibíro, 177
Hotterié, a "band" ("coterie") of Danagla, *i.e.*, slave-hunters
Humboldtia, 310, 350
Hunchbacks, 64
Hunting-trophies, 394
Hyænas, 99, 223, 233, 264, 281, 353; fighting lions, 279; *see also* Lycaon pictus
Hyas ægyptiacus, a plover, the "crocodile's friend," 4
Hydrocyon, a fish, 175
Hydrotragus Spekii (an antelope), 121
Hyphæne thebaica, Mav., *see* Dum-palm
Hyphantica æthiopica, Sund. (a bird), 393
—— erythrops, 176
Hyphantornis (weaver-bird), 146, 319, 394
—— abyssinica, 173, 183
—— dinidiata, 167
—— guerini, 375
—— ocularis, 404
—— Spekei, 245
Hypoxis, *see* Lakorta
Hyptis, an oil-plant, order Labiatæ, 309, 352
—— spicigera, 327
Hyrax, coney, 2, 240, 326
Hystrix, a porcupine ("nonda"), 396

Ibiala, khor (4° 10′ N. 33° 8′ E.), 240
Ibi, dist. (3° 52′ N. 31° 58′ E.), 262
Ibis, bird, 4
Ibrahim Aga, 465, 466, 469
Ibrahimya, *see* Fashelu
Ichneumons, 227; *see also* Herpestes
Iddio, a division of the Zandē, also known as Makraká, 508
Ifuddu, mt. (4° 15′ N. 32° 43′ E.), 256
Igeri, khor (mouth 3° 23′ N. 32° 5′ E.), 99
Ikoto, dist. (4° 10′ N. 33′ 10′ E.), 241
Ikwa, Wando's son, 451
Iladze, khor (3° 20′ N. 32° 5′ E.), 99
Imudi, vill. (6° 27′ N. 29° 17′ E.), 347
Indiarubber, *see* Carpodinus
Indicator Sparmanni, white-eared honey-guide, 307

Ipomœa, a convolvulus, 7, 12, 362
Irari, khor (mouth 3° 23 N. 32° 5′ E.), 99
Irenga, Renga, or Arenga, dist. (14° 40′ N. 33° 20′ E.), 238, 241, 269, 293, 415
Irkabwe, native name of tobacco, 31, 77
—— vill. (0° 53′ N. 32° 33′ E.), 37
Iron ores, 201, 291, 324, 382; smelters, 25; trade, 122
Irrisor erythrorhynchus, Lath., red-billed wood-hoopoe, 315, 361
Irume, khor (4° 17′ N. 33° 3′ E.), 240
Islam, made no progress, 414
Ispidina picta (a bird), 245
Isu or Echu, river (4° 35′ N. 29° 12′ E.), 383
Iti, khor (3° 48′ N. 32° 5′ E.), 262
Itiaga, hill (3° 50′ N. 32° 3′ E.), 262
Ito, khor (5° 17′ N. 30° 44′ E.), 307, 357; *see also* Labikko
Ittatok, mt. (4° 40′ N. 32° 50′ E.), 232, 292
Ivory, 117, 251, 268, 269

Jabakot (2° 15′ N. 31° 2′ E.), 151, 152
Jacana (bird), *see* Parra
Jale, dist. (2° 35′ N. 33° 15′ E.), 251
Jamma, hill (3° 50′ N. 32° 50′ E.), 255
Janda (Ganda), sta. (3° 27′ N. 30° 58′ E.), 195, 363
Jangbi, vill. (3° 35′ N. 32° 47′ E.), 247
Jange, *see* Dinka
Jatropha manihot, L., *see* Manioc
Jebel (Gebel), Arabic, mountain
Jeifi, mt. (Fagrinia), sta. (3° 26′ N. 32° 5′ E.), 11, 99
Jellabas (gallabas), traders, 458, 481
Jemid, vill. (6° 30′ N. 30° 30′ E.), 317, 320
Jer, dist. (6° 30′ N. 29° 16′ E.), 346
Jinja ("stones") or Ripon Falls (0° 22′ N. 33° 30′ E.), 398
Jirri, dist. (6° 20′ N. 29° 47′ E.), 329
Jombi, vill. (6° 55′ N. 29° 4′ E.), 345
Jondi, vill. (3° 14′ N. 28° 40′ E.), 190
Joro, vill. (6° 2′ N. 29° 49′ E.), 328
Jot, sta. (6° 55′ N. 29° 8′ E.), 342
Jubba, vill. (5° 4′ N. 31° 13′ E.), 302, 304
Julu, mt. (3° 2′ N. 32° 20′ E.), 109, 272
—— mt. (3° 46′ N. 32° 57′ E.), 246
Junker, Dr., 181, 200, 421, 451, 454, 460 (arrived at Ladó, January 1884), 464, 465, 473, 474, 476, 477, 479 (arrived at Anfina's), 485, 491, 493, 494, 498, 499 (departed for Ugánda), 502
Jur Ghattas, sta. (7° 16′ N. 28° 32′ E.), 430, 457, 469, 486

Kabaru, vill. (0° 49′ N. 32° 32′ E.) 39
Kabayendi, vill. (4° 28′ N. 30° 8′ E.), 373, 374, 466
Kabiggo, hot springs (1° 45′ N. 31° 20′ E.), 177
Kabréga, biographical notice, 516; character, 61, 62; audience, 60, 64, 68, 69; negotiations, 472, 486–490, 492, 494, 499, 501; invites author, 438; his capital, 81, 112
Kabrogeta, khor (1° 27′ N. 31° 35′ E.), 70
Kabuli, khor (2° 12′ N. 32° 33′ E.), 279, 280
Kachoro, brook, near Kibero, 183
Kadabo, a Monbuttu chief (2° 48′ N. 29° E.), 205, 446
Kadenokoka (Kittagong) (4° 38′ N. 32° 18′ E.), 221
Kadwe (Kadue), khor, or Kirinion (4° 48′ N. 31° 57′ E.), 289, 215
Kæmpferia, L., a genus of Zingiberaceæ, 363
Kafali, khor (4° 38′ N. 32° 18′ E.), 221
Kafatasi (1° 43′ N. 30° 45′ W.), 151
Kaffa, country, south of Abyssinia, 415
Kaffai, mt. (4° 11′ N. 32° 33′ E.), 255
Kafu, khor (mouth, 1° 39′ N. 32° 20′ E.), 28, 50
Kagei (Kagehyi), on south shore of Victoria Lake (2° 22′ S. 33° 20′ E.), 116
Kagoro, chief of Kibíro, 171
Kahura, dist. (0° 59′ N. 32° 30′ E.), 31, 131
Kairira, river (source 0° 48′ N. 32° 30′ E.), 46, 130
Kakibi, river, 507; *see* Dueru
Kajumbo, mt. (4° 43′ N. 32° 10′ E.), 217, 290
Kaka, mt. (seen from near Fatíko), 277
Kakuak, dist. and tribe (3° 50′ N. 30° 50′ E.), 362, 363, 367, 371
Kalavinya, mt. (seen from near Fatíko), 277
Kalika, mt. (0° 35′ N. 32° 33′ E.), 129
—— dist. and tribe (3° N. 30° 50′ E.), 144; physique, dress, 364
—— sta. (Kibi), (2° 55′ N. 30° 53′ E.), 364
Kamari, vill., near Wandi, 481
Kambo, a tuber, 423
Kamisoa, Rionga's successor, 485, 486, 491
Kampodi, a charm in Ugánda, 47
Kamrasi, biographical notice, 516
Kanagurba, chief, 134
Kanakók, mt. (2° 58′ N. 32° 25′ E.), 277
Kandubituyu, rivulet (0° 20′ N. 32° 38′ E.), 48
Kanga, sta. (4° 42′ N. 29° 32′ E.), 380
Kangara, vill. (2° 8′ N. 31° 44′ E.), 139
Kanieti, khor, *see* Ginetti
Kanna, a Zandē chief (2° 52′ N. 27° 82, E.), 445, 454
—— zer. (5° 16′ N. 29° 8′ E.), 383, 453

Kantar, a weight (about two hundredweight), 374
Kapeki, vill. (0° 57′ N. 32° 42′ E.), 36, 131
Karagwa, country (capital 1° 43′ S. 31° 5′ E.), 63, 489
Karaibote, wells (6° 27′ N. 29° 17′ E.), 347
Karro, vill. (6° 18′ N. 29° 42′ E.), 350
Karsita, vill. (2° 6′ N. 32° 30′ E.), 282
Kasegu, chief, 131
Kasidie, vill. (0° 28′ N. 32° 40′ E.), 46
Kasuba, khor (4° 45′ N. 32° E.), 215
Kasvar, district in Lúr, *see* M'svar
Katagrua, Kabréga's prime minister, 59, 60, 62, 63
Katiga, vill. (4° 32′ N. 32° 52′ E.), 235
Kawa, town (14° N. 32° 45′ E.), 435, 493
Kayala, a palm grove (4° 57′ N. 32° 30′ E.), 224, 228
Kederú, tribe and sta. (5° 11′ N. 30° 33′ E.), 306–309, 356; physique, 309; dress, 309; houses, 307; graves, 356; hunting-trophies, 356
Kediba, vill. (5° 18′ N. 30° 53′ E.), 306, 387
Kela, hill (3° 52′ N. 33° 3′ E.), 243, 295
Kelen, mt., or Valani (4° 12′ N. 31° 47′ E.), 6
Kembe, khor (3° 48′ N. 30° 53′ E.), 366
Keniy, mt. (4° 10′ N. 31° E.), 361
Kenus, dist. on the Nile, 23° 20′ N.; Kenusi, a native of Kenus, 468
Kenyi, chief, 485
Kenyimasa, vill. (5° 43′ N. 30° 19′ E.), 355
Kerbolong, vill. (4° 16′ N. 31° 17′ E.), 361
Kerefi, vill. (3° 57′ N. 31° 58′ E.), 257, 297
Keremallah, the representative of the Mahdi, 462, 463, 467–471, 473, 475, 476, 478, 480, 482, 484, 505 (his death)
Keremu, vill. (6° 3′ N. 30° 3′ E.), 324
Kero, mt. (4° 13′ N. 30° 28′ E.), 361
Kharíf (Arabic), rainy season, autumn
Khartúm, mt., *see* Nyedi
Khartúm, town (15° 37′ N. 32° 45′ E.), 432, 476, 482
Khaya-tree, 247, 261
"Khedive," steamer, 140, 491, 493
Kheran, plural of khor (*q. v.*)
Khofir, mt. (4° 6′ N. 33° 11′ E.), 241, 295
Khor (plural kheran), Arabic, ravine, torrent-bed, torrent, and in the Sudán also perennial stream
Khor-et-tin (loamy torrent) (3° 18′ N. 32° 7′ E.), 110
Khor-et-tin, or Loreza (3° 40′ N. 32° E.), 8
—— or Berr (4° 57′ N. 31° 30′ E.), 301
Kibali, 439, 441, 450, 456; *see also* Welle
Kibboia, a plant, 347
Kibi, head-stream of the Welle (3° N. 30° 50′ E.), 187
Kibíro, vill. (1° 45′ N. 31° 20′ E.), 172, 175; salt manufacture, 176; hot springs, 177
Kich, tribe (6° 50′ N. 30° 50′ E.), 320, 522
Kidi, *see* Umiro
Kifa, a Zandé chief, 421
Kigelia, a tree, order Bignonieæ, 110, 265, 291, 301, 363
Kija, mt. (3° N. 32° 19′ E.), 272
Kijaja, vill. (2° 6′ N. 32° 40′ E.), 137, 283
Kijeveka, vill. (1° 38′ N. 31° 55′ E.), 72
Kikinda, vill. (1° 28′ N. 31° 35′ E.), 70
Kikunguru, dist. (1° 55′ N. 32° 40′ E.), 282
Kilio, mt. (4° 28′ N. 32° 45′ E.), 234, 292
Kilive, khor (3° 56′ N. 31° 56′ E.), 260
Killa, rock (5° 26′ N. 30° 27′ E.), 355
Kimanya, vill. (1° 40′ N. 31° 37′ E.), 53, 71
Kimil, khor (3° 48′ N. 30° 54′ E.), 366
Kindar, khor (4° 9′ N. 31° E.), 362
Kingfisher, *see* Ceryle, Halcyon, Dacelo
"Kinyabantu," an anthropoid ape, 399
Kióga, lake (1° 30′ N. 32° 50′ E.), 282
Kiotosi, vill. (1° 20′ N. 32° 22′ E.), 134
Kirembwe, vill. (0° 45′ N. 32° 36′ E.), 41
Kíri (4° 18′ N. 31° 40′ E.), 5, 15, 513
Kirinion, khor, *see* Kadwe
Kirk, Sir John, 495, 496
Kiróto, sta. (2° N. 31° 58′ E.), 19, 138, 146
Kirshambe, khor (5° 40′ N. 31° 55′ E.), 229
Kisra (Arabic), durrah pancake, 456
Kisúga, vill. (1° 45′ N. 32° 2′ E.), 24, 50, 51, 72, 122
Kitakuba, vill. (0° 36′ N. 32° 50′ E.) 45
Kitara, vill. (0° 55′ N. 32° 30′ E.), 13
Kite, *see* Helotarsus, Milvus
Kiteng, mt. (3° 40′ N. 33° 40′ E.), 249
Kiti, vill. (0° 27′ N. 32° 39′ E.), 47
—— mt. (0° 27′ N. 32° 40′ E.), 129
Kitongali, vill. (1° 33′ N. 31° 36′ E.), 55, 70
Kittagong (Kadenokoka) (4° 38′ N. 32° 18′ E.), 221
Kituanga, vill. (2° 40′ N. 32° 14′ E.), 138
Kiza, chief, 23
Kobbo, khor (4° 10′ N. 30° 37′ E.), 368
Koch (Koki), vill. (2° 5′ N. 32° 36′ E.), 136, 281
Koche (Koshe or Koshi), dist. (2° 45′ N. 31° 25′ E.), 97, 143

Koda, khor (5° N. 31° 23′ E.), 302, 306
Koddu, dist. (6° 8′ N. 29° 44′ E.), 351
Koja, dist. (0° 12′ N. 32° 48′ E.), 127
"Kojur," magician or rainmaker among the Dinka
Koka, vill. (4° 57′ N. 31° 42′ E.), 300
Koki (Koch), vill. of Shúli (2° 46′ N. 32 28′ E.), 276, 278; *see also* Koch
Kokmiria, vill. (2° N. 32° 10′ E.), 138
Kokobere, khor (5° 48′ N. 30° 22′ E.), 318
Kola-nut, 442, 199, 207
Koliang, dist. (3° 5′ N. 34° 10′ E.), 252, 296
Kolomello, cave (4° 40′ N. 32° 10′ E.), 219
Konae, vill. (2° 47′ N. 33° 6′ E.), 251
Kongoro, khor (4° N. 30° 55′ E.), 362
Kordofan (13° N. 31° E.), 393, 394, 522
Koro, vill. (2° 45′ N. 32° 29′ E.), 278
Korobe, mt. (3° 53′ N. 30° 59′ E.), 362
—— (Korobék ?), sta. (3° 47′ N. 30° 55′ E.), 362, 513
Korola, mt. (4° 42′ N. 32° 15′ E.), 221
—— mt. (4° 48′ N. 32° 26′ E.), 221
Korova, khor (2° 23′ N. 32° 28′ E.), 279
Koshe (Koshi), *see* Koche
Koyo, vill. (6° 17′ N. 29° 42′ E.), 350
Koz, khor (4° 42′ N. 32° 43′ E.), 231, 232, 234, 236, 239–241, 291, 292, 294
Krafa, khor (4° 39′ N. 29° 58′ E.), 380
Kúbi, sta. (3° 11′ N. 28° 41′ E.), 315
Kubia, vill. (2° 3′ N. 31° 52′ E.), 139
Kuchuk Ali, zer. (7° 30′ N. 28° E.), 469
Kudurma, vill. (4° 42′ N. 29° 47′ E.), 380, 466, 471
Kuerkuit, or Loka, mt. (4° 16′ N. 31° 2′ E.), 361
Kuftan (Arabic), a coat of light material
Kuitu, hills (3° 55′ N. 31° 53′ E.), 258, 259, 297
Kuji, dist. (4° 55′ N. 31° 48′ E.), 300
Kuka, in Bornu (12° 50′ N. 13° 30′ E.), 441
Kuku, mts. (3° 40′ N. 31° 50′ E.), 6, 7, 9, 140
Kuluken, khor (3° 43′ N. 32° 12′ E.), 263
Kunufi, mt. (4° 53′ N. 31° 33′ E.), 300
Kurdu, mt. (3° 40′ N. 32° E.), 9
Kurja, mt. (3° 56′ N. 30° 27′ E.), 362
Kurpio, khor (4° 23′ N. 30° 15′ E.), 372
Kuron, dist. and mt. (3° 55′ N. 33° 33′ E.), 241, 249, 293, 415
Kuryok, mt. (5° 9′ N. 30° 41′ E.), 357
Kyago, mt. (4° 24′ N. 31° 30′ E.), 360
Kyai, khor (1° 37′ N. 31° 10′ E.), 59, 60, 65, 70
Kyapisi, mt. (0° 38′ N. 32° 40′ E.), 44
Kyatangura, vill. (3° 24′ N. 32° 40′ E.), 272
Kyelamir, mt. (4° 33′ N. 33° E.), 242
Kyente, hill, at Kibiro, 175
Kyero, vill. (5° 27′ N. 29° 48′ E.), 353
Kyikasa, vill. (0° 40′ N. 32° 40′ E.), 42
Kyivambiri, mt. (1° 20′ N. 32° 30′ E.), 29

Labiko, khor (5° 20′ N. 30° 35′ E.), 356
Labikko, khor (5° 25′ N. 30° 45′ E.), so called, but really the Ito, 308
Labilla, mt. (Abu Sala) (3° 21′ N. 32° 13′ E.), 158, 262
Labongo, dist. (3° 20′ N. 32° 40′ E.), 247, 272, 296
—— or Fabongo, in Shúli (2° 37′ N. 31° 30′ E.), 272; *see also* Bongo
Labóre, sta. (3° 56′ N. 31° 50′ E.), 7, 17, 258
Laburomor, mt. (3° 45′ N. 32° 50′ E.), 246
Ladó, sta. (5° 1′ N. 31° 48′ E.), 1, 437 (drought), 453 (flooded), 456, 458, 464 (burnt), 472 (fortified), 480 (dissatisfaction), 482 (council of war, April), 488 (besieged), 495, 500 (mutiny), 510 (evacuated) 513
Lafit, mts. (4° 54′ N. 32° 45′ E.), 219, 231, 235, 242, 292
Lagonosticta rufopicta, a finch, 56, 174
Lakorta-tree (Schnizleinia [Hypoxis] sp. n.), 241, 274, 418
Lalak, mt. (3° 37′ N. 32° 43′ E.), 246, 247, 249, 254, 255
Lamellicornis (a beetle), 146
Lamo, mt. (3° 42′ N. 32° 55′ E.), 246, 249, 255, 295
Lamprocolius chalcurus, glossy thrush, 258
Landolphia florida, Bth. (yields caoutchouc), 443
Lang, sta., *see* Gōk-el-Hassan
Langa, khor (4° 38′ N. 29° 58′ E.), 380
Langara, vill. (4° 37′ N. 29° 49′ E.), 380
Langia (3° 43′ N. 32° 58′ E.), 243, 246, 295
Lángo, tribe (2° 30′ N. 32° 30′ E.), character, 21; language, 296; frisures, 142, 296; houses, 288; domestic animals, 391; the country, 250, 296, 400
Langomeri, vill. (3° 49′ N. 30° 45′ E.), 366
Langora, mt. (3° 55′ N. 33° 5′ E.), 242
Languello, hill (3° 15′ N. 32° 48′ E.), 249, 252
Languerion (3° 42′ N. 32° 28′ E.), 267
Lanius gubernator, a shrike, 366
Lapwing, *see* Lobivanellus, Sarciophorus, Vanellus
Lara, peak (3° 46′ N. 33° E.), 246
Larema, vill. (3° 7′ N. 32° 56′ E.), 250
Larogoi, old Nile bed (3° 7′ N. 31° 35′ E.), 161
Laterite, 521

Lathyrus, a pea, 131
Latinoto (3° 43′ N. 32° 30′ E.), 254
Latjiet, mt. (3° 32′ N. 32° 42′ E.), 246, 247, 255, 267
—— vill. (3° 17′ N. 32° 35′ E.), 273
Latome, chief of Loronio, 232, 233
Latúka, tribe (4° 30′ N. 33° E.), 224–226, 229, 230, 233–239; physique, 236, 293; disproportion of sexes, 226; original seats, 242; language, 239, 242, 293; tribal marks, 225, 237; dress and ornaments, 225, 235; villages, 224, 226, 233; a funeral, 230; women, 229; occupations, 224, 225, 237, 238, 292; amulets, 230, 235; features of the country, 292; evacuation, 468, 513
Lau, khor (5° 35′ N. 29° 42′ E.), 353
—— vill. (6° 43′ N. 30° 28′ E.), 320
Lauda, dist. (4° 20′ N. 32° 10′ E.), 229, 231
Lavalong, mt. (4° 16′ N. 32° 57′ E.), 240
Layima, vill. (3° 7′ N. 32° 35′ E.), 273
Lawsonia, plant, 252
—— inermis, 401
Lazimon, khor (3° 10′ N. 32° 2′ E.), 104
Lebbii, khor (3° 50′ N. 32° E.), 262
Ledovan, mt., *see* Shua
Legiri, mt. (near Lotese), 240
Lekebe, khor (3° 30′ N. 30° 58′ E.), 363
Lemis, vill. (2° 57′ N. 30° 57′ E.), 364
Lemons, sweet, 363, 373; *see also* Citrus
Lemuridæ, 397; *see also* Otolicnus, Galago
Léndu, dist. (2° 20′ N. 30° 50′ E.), 143, 153, 167
Lenga-Lenga, vill. (3° 3′ N. 32° 30′ S.), 275
Lenz, Dr., 505
Leopards, 101, 110, 124, 223, 245, 260, 265, 281
Lepidosiren, *see* Protopterus
Leptadenia pyrotechnica, Dne., a resinous shrub, 401
Leptoptilus crumenifer, *see* Marabou stork
Lere, hill (3° 27′ N. 32° 3′ E.), 98
—— swamp (5° 7′ N. 31° 12′ E.), 306
Lerme (6° 45′ N. 29° 36′ E.), 334
Leruama, mt. (3° 9′ N. 32° 57′ E.), 249, 252, 296
Lesi, tribe (5° 55′ N. 29° 50′ E.), 325–327
Leundi, dist. (Londú? c. 1° 45′ N. 30° E.), 508
Liena, vill. (5° 37′ N. 31° 58′ E.), 228
Liggi, tribe (4° 40′ N. 30° 30′ E.), 369
Lila or Gulmar, khor (6° 42′ N. 29° 12′ E.), 345, 348
Lili, peak (4° 43′ N. 32° 3′ E.), 216
Limur, khor (3° 40′ N. 32° 32′ E.), 254, 297
Linant de Bellefonds, E. (son of Linant Pasha, visited Mtésa, 1875, and there met Stanley; was killed after return, August 1875), 44, 129
Lions, 101, 223, 228, 233, 245, 265, 279, 292, 299, 349, 352
Lira, dist. and mt. (2° 46′ N. 33° 5′ E.), 251, 269
—— vill. (3° 9′ N. 32° 58′ E.), 249
Lirem (Lorem), dist. and sta. (30° N. 33° 45′ E.), 244, 252, 296, 415
Liria, tribe (4° 37′ N. 32° 15′ E.), 219, 220, 289, 291
Lizards, 332; *see also* Varan
Loa, khor (5° 18′ N. 30° 40′ E.), 357
Loba, dist. (6° 48′ N. 29° E.), 293, 345
Lobalede, sta. (6° 23′ N. 29° 28′ E.), 348
Lobbōr, country (2° 20′ N. 33° 30′ E.), 251, 252, 415, 428
Lobivanellus senegalensis, a lapwing, 141, 280
Lobull, mts. (4° N. 32° 45′ E.), 254, 255
Loddo, khor (4° 40′ N. 32° 20′ E.), 221, 229, 291
Lodin, peak (4° 40′ N. 32° 58′ E.), 292
Lodio, mt. (4° 40′ N. 32° 58′ E.), 242
Lofurri, hill (3° 49′ N. 32° 3′ E.), 262
Lofuta, dist. (5° 4′ N. 31° 13′ E.), 302
Logere, mts. (4° 20′ N. 33° 12′ E.), 238, 292
Loggede, vill. (3° 48′ N. 33° E.), 246
Loggolum, dist. (2° 58′ N. 32° 25′ E.), 277
Logguren, *see* Loguren
Logiteli, hill (3° 49′ N. 3° 30′ E.), 246
Logo, tribe and dist. (3° N. 30° E.), 186, 199, 365, 449, 456
——, sta. (3° 10′ N. 30° 5′ E.), 439
Lohe, mt. (4° 32′ N. 32° 18′ E.), 218
Loka, mt. (4° 16′ N. 31° 2′ E.), 361; *see* Kuerkuit
Lokalla, mt. 3° 55′ N. 32° 15′ E.), 255
Lokoya, mts. (4° 40′ N. 32° 5′ E.), 234, 289, 290
Loligono, mt. (5° 2′ N. 32° 30′ E.), 219, 292
Lomario, khor (5° 55′ N. 30° 23′ E.), 319
Lombo, a tuber, 365; *see* Kambo
Lomu, range (4° 4′ N. 33° 10′ E.), 240, 242, 294
Londú, dist. and sta. (1° 41′ N. 31° 52′ E.), 22, 51, 72, 154
—— in Lúr (1° 40′ N. 30° 20′ E.), 154, 168
Long-claw, *see* Macronyx
Longobo, mt. (4° 48′ N. 32° 3′ E.), 216
Longolet or Ongolet (4° 40′ N. 32° 48′ E.), 234
Lophira, a tree, order Dipterocarpeæ, 208
Loppolo, khor (3° 53′ N. 33° 5′ E.), 243

Loranthus (mistletoe), 275
Lodafe, pool (4° 3′ N. 31° 22′ E.), 359
Loreza (Khor-et-tin) (3° 40′ N. 32° E.), 8
Lori, dist. (6° 20′ N. 29° 35′ E.), 349, 352
—— vill. (5° 40′ N. 29° 45′ E.), 352
Loriajo, vill. (4° 36′ N. 32° 50′ E.), 234, 293
Loron, chief of Gondokóro, 215, 458
Loronio, vill. (4° 40′ N. 32° 47′ E.), 224, 232, 233, 291, 292
Lotese, mt. (4° 20′ N. 32° 51′ E.), 240
Loto, dist. (3° 7′ N. 32° 56′ E.), 250
Lotortioni, khor (4° 19′ N. 31° 25′ E.), 360
Lotter, chief of Latúka, 223
Lourdel, Catholic missionary, 495
Lubari, tribe (2° 50′ N. 31° E.), 143, 153, 364, 365
Lubia, Arab name for the Vigna sinensis (*q. v.*)
Lubwa, vill. (0° 25′ N. 33° 30′ E.), 516
Luggar (Dr. Junker's) (3° N. 30° 20′ E.), 364
Lukomukui, swamp (5° 18′ N. 30° 57′ E.), 306
Lulunyi, swamp (6° 19′ N. 29° 40′ E.), 349
Lumoga, mt. (3° 55′ N. 32° 46′ E.), 254, 268
Lungudi, vill. (3° 25′ N. 32° 42′ E.), 271
Lunn, khor (3° 57′ N. 30° 55′ E.), 362, 363
Lupton-Bey (arrived at Ladó September 1879, and was appointed Governor of Bahr-el-Ghazal in 1881; he surrendered to the Mahdi), 405, 430, 437, 451, 453, 455, 457, 458, 462, 463, 465, 467, 476, 512
Lúr, or Alúr, tribe (2° N. 31° E.), 143–45, 148–50, 154–55; language, 143, 150; dress, 143; weapons, 155; filing teeth and tattooing, 154; houses, 144, 145, 148, 163; granaries, 149; matrimonial, 155; burial, 155; women, 149; chiefs, 154; fishing, 149; features of the country, 15, 143
Luri, khor (4° 55′ N. 31° 47 E.), 361
Lurja, mt. (4° 25′ N. 31° 25′ E.), 359
Luscinia philomela, Bechst. (nightingale), 395
Lutomba, vill. (3° 2′ N. 30° 43′ E.), 386
Lutra (otter), 121, 382
—— inunguis, 95
Luttu, hill (5° 2′ N. 30° 43′ E.), 386
Lwal, vill. (6° 22′ N. 30° 47′ E.), 321
Lycaon pictus (hyæna dog), 401
Lynx, *see* Felis caracal, Felis caligata

Mabisanga, tribe, *see* Abisanga
Mabode, tribe (2° N. 28° E.), 197, 203, 446
Mabollo, swamp (6° 19′ N. 29° 34′ E.), 349
Mabongo, sta. (6° 34′ N. 29° 12′ E.), 346
Mackay, Mr. A. M. (of the Church Missionary Society), 494, 495, 504, 508, 522
Macrodipterix (night-jar), 113
Macronyx croceus, Vieill. (long-claw, a bird), 397
Madapolam, a kind of cloth, 489
Mádi (3° 30′ N. 32° E.), 10–13, 101–103; physique, 102; language, 103, 161; divisions, 365; dress and ornaments, 10, 13, 102; villages, 12; marriage, 103; funerals, 260; graves, 261; smiths, 11; agriculture, 101, 365; transmigration, 260; votive trees, 101
—— peak, Jebel Asal or Ekara (*q. v.*)
—— vill. (3° 36′ N. 32° 36′ E.), 248, 253, 268, 297
Mádi-Lokoya, peak, *see* Remo
Madinga, a musical instrument, 519
Madiri, mt. (50° 42′ N. 29° 45′ E.), 352
Madundi, tribe (1° 40′ N. 31° 52′ E.), 17, 18, 52, 72
Maga, vill. (4° 15′ N. 30° 32′ E.), 370
Magangas ("magicians"), 16, 93
Magpie, Senegal, 343; *see also* Cyanopica, Pitta
Magulu, vill. (6° 32′ N. 29° 16′ E.), 347
Magúnga, vill. (1° 48′ N. 30° 50′ E.), 151
Magúngo, sta. (2° 16′ N. 31° 30′ E.), 15, 140, 145
—— tribe (2° N. 32° E.), 16–18, 137–38; language, 17; dress, 16, 137; filing teeth, 16; houses, 18, 138; food, 17; burial, 17; marriage, 16; superstitions, 16
Mahagi, sta. (2° 10′ N. 31° 16′ E.), 147, 166
—— vill. (1° 58′ N. 31° 2′ E.), 159
Mahdi, his revolt, 430, 431; summons, 476; letter on fall of Khartúm, 482
Maholu, khor (6° 33′ N. 29° 15′ E.), 347
Maize (Zea mays), 45, 46, 55, 193, 282, 288, 418, 423, 449
Maigo, sta. (3° 17′ N. 28′ 12′ E.), 195, 445
Maigo, tribe, *see* Majo
Majo, or Maigo, tribe (2° 10′ N. 27° 50′ E.), 203, 209
Makedo, falls of (4° 25′ N. 31° 40′ E.), 9
Makraká, or Iddio, a Zandē tribe (4° 30′ N. 30° 15′ E.), 373–377; migration, 375; divisions, 376; language, 377; dress, 373; food, 376; villages, 370, 376; women, 371, 377; occupations, 370, 371, 377, 388; reoccupation of country, 510
Makraká-Sugaïre, sta. (4° 28′ N. 30° 17 E.), 388
Makúngo (plur. Bakúngo), title of chiefs of the first rank in Unyóro, 89

Makwa (Makua), the Zandē name of the Welle (*q. v.*)
Malach, khor (2° 47′ N. 32° 28′ E.), 278
Malek, vill. (6° 35′ N. 29° 40′ E.), 333
Mallows, *see* Hibiscus and Malvæ
Molokwan, mt. (4° 52′ N. 31° 26′ E.), 300
Malvæ (mallows), 131
Malwa, a drink, 518
Malzac, M. de, 335
Mambango, chief of Monbuttu, 204
Mambere, Mumberi, or Momi, tribe (3° 10′ N. 29° 30′ E.), 203, 381
Mamvolo, peak (6° 2′ N. 30° 1′ E.), 324
Manda, sta. (5° 1′ N. 29° 50′ E.), 387
Mandari, or Mandar, tribe (3° 35′ N. 31° 20′ E.), 321, 369
Mandinda, a musical instrument, 35
Mangala, a game, 519
Mangillihi, pool (6° 33′ N. 29° 13′ E.), 346
Mango seeds, 459
Manihot utilissima, *see* Manioc
Manioc, 75, 80, 187, 206, 370, 371, 376, 449
Manis Temminckii (the Manis), 184, 288, 403
Manji, a Zandē chief, 445
Manyuema, tribe on upper Congo (4° S. 27° E.), 494
Marabou stork (Leptoptilus crumenifer), 341
Mari, a Momvu tribe (3° 30′ N. 28° 45′ E.), 187
Marquet, Mr., 424
Marshia, tribe at Rimo (4° 15′ N. 30° 33′ E.), 369, 370
Masaba, country (1° 20′ N. 33° 22′ E.), 147
Masai, tribe, 505
Masala, vill. (0° 15′ N. 34° 20′ E.), 505
Masiki, an anthropoid ape, 399
Masíndi (1° 40′ N. 31° 55′ E.), 21, 22
Mason, Colonel, 4
Masonze, a Zandē chief, 445
Masudi-bin-Abeid-bin-Hamis, 488, 489
Matebere, a chief, 71, 72
Matongali, a second-class chief in Unyóro, 89
Matyum, vill., south-east of Mrūli (c. 1° 30 N. 32° 30′ E.), 92
Maudu, tribe of Monbuttu, 203
Maya, khor (2° 6′ N. 32° 27′ E.), 283
Mayanga, *see* Babukur
Maye, chief, 232, 236, 293
Mbala, Munza's son, 447, 448
—— vill. (4° 19′ N. 30° 27′ E.), 371
Mbaga, Gambari's brother, 189
Mbaro, vill. (5° 30′ N. 29° 43′ E.), 352, 353
Mbazi, chief, 67
Mbelle, vill. (5° 4′ N. 29° 45′ E.), 352
Mberekai, a gourd
Mberi, tribe in Monbuttu, 203
Mbili, tree, yields oil
Mbio, Zandē chief (5° 30′ N. 27° 20′ E.), 259, 374, 461 475
Mbittima, Zandē chief (3° 40′ N. 27° 20′ E.), 204, 355, 445
Mboga (0° 50′ N. 29° 50′, E.), 507, 508
Mbomu, river (source 5° 5′ N. 27° 15 E.), 455
Mbru, a Zandē chief, 445
Mbugu, bark-cloth (*q. v.*)
Mdilo, hills (5° 41′ N. 29° 45′ E.), 352
Meaje-Majo, tribe (2° 10′ N. 27° 50′ E. ?), 203
Meajo (Junker's Medge?) (2° 40′ N. 28° E.), 196
Megalæma bilineata, Sund. (a bird), 404
Mejidie, a silver coin, value 20 piastres, or 3s. 6d., 489
Mekke, khor (4° 41′ N. 29° 37′), 381
Melierax polyzonus (a goshawk), 402, 406
Mellan, dist. (6° 50′ N. 29° 10′ E.), 342
Melocichla mentalis, Fras. (a bird), 397
Mende, khor (4° 53′ N. 29° 55′ E.), 387
Mennabor, khor (2° 41′ N. 32° 26′ E.), 278
Menze, khor (4° 28′ N. 30° 8′ E.), 373, 374
Mer, dist. (6° 43′ N. 29° 10′ E.), 345
Merachak, vill. (2° 7′ N. 32° 19′ E.), 283
Merbu, khor (6° 3′ N. 29° 37′ E.), 351
Meridi, khor (4° 42′ N. 29° 27′ E.), 382, 384
Merops (bee eater), 394
—— albicollis, 227, 302
—— Bullockii, 141, 227, 245
—— pusillus, 245
Merre, mt. (5° 30′ N. 30° 22′ E.), 355
Merve, khor (3° 56′ N. 31° 55′ E.), 257, 260
Mervua (durrah beer), 76
Meshra-er-Rēk (8° 14′ N. 29° 10′ E.), 457, 469
Meshra-es-Seid (3° 10′ N. 31° 37′ E.), 161
Meshrat-el-Jogān, ford (6° 2′ N. 29° 57′ E.), 325
Meteorological — after-glow, 65; hail-storms, 63
Meto, mt. (3° 38′ N. 31° 48′ E.), 8, 140
Mezeju Mkuru, mts. (Mozeju Mkuru of map) (0° 15′ N. 30° 10′ E.), 67
Mfumbiro (Kinyóro), cook
Mianja (upper Mwerango, 1° 25′ N. 32° 5′ E.), 47, 48
Mice, in the Mádi country, 99
Mienval, wells (6° 42′ N. 29° 40′ E.), 333
Migration of birds, 293
Milk, in Unyóro, 77
Milvus (a kite), 368
—— parasiticus, 34, 406
Mimi, mt. and sta., south-east of Tingazi, 191

Mimosas, 7, 18, 24, 132, 135, 521
Mimusops, a tree, order Sapotaceæ, 159
Mindi, vill. (4° 32′ N. 29° 57′ E.), 378
Minstrels, in Ugánda, 32
Mire, or Dore, mt. (4° 45′ N. 31° 10′ E.), 300
Miri, vill. (3° 40′ N. 32° 34′ E.), 254
Mirshuk or Gollolindu (4° 45′ N. 32° 2′ E.), 216
Missionaries in Central Africa, 428, 522
Mistletoe, *see* Loranthus
Mitika (4° 19′ N. 31° 13′ E.), 360
Mittu, tribe (5° 30′ N. 29° 20′ E.), 308, 327, 356
Mizani, vill. (5° 23′ N. 30° 28′ E.), 356
Mlamba, a drink, 518
Mlisa, vill. on Lake Albert (2° 4′ N. 31° 28′ E.)
Moddoberi, vill. (6° 22′ N. 29° 47′ E.), 329
Modira, khor (4° 40′ N. 52° 8′ E.), 217
Modo or Ras-el-Mayo (2° 19′ N. 32° 31′ E.), 280
Modzua, khor (4° 36′ N. 29° 50′ E.), 379
Moffa, chief of Mvolo, 325
Mogedo, vill. (4° 27′ N. 31° 29′ E.), 358
Moggu (Falongo's vill.) (4° 50′ N. 29° 31′ E.), 384
Mogille, mt. (4° 36′ N. 29° 12′ E.), 384
Mohammed Biri, 494
—— es-Sayad, 479
—— Salah of Bornu, 410
Mok, tribe (7° 18′ N. 28° 45′ E.), 339
Molere, mt. (4° 51′ N. 32° 4′ E.), 216
Mollo, vill. (5° 18′ N. 30° 37′ E.), 356
—— vill. (5° 34′ N. 30° 6′ E.), 354
Molo, dist. (6° 5′ N. 30° 25′ E.), 321
Molong, mt. (4° 17′ N. 32° 53′ E.), 219, 231
Mombasa, town (4° 5′ S. 39° 40′ E.), 505
Momvu, tribe (3° N. 29° E), 187, 201, 203
Monbuttu, tribe (*see* map), 190–192, 196–213; origin, 202, 454; divisions, 196; bandaging the head, 212, 447; circumcision, 212; clannishness, 315; dress, &c., 210, 211; painting, 447; houses, 188, 190, 212; food, cannibalism, 192, 206; social institutions, 198, 208–210, 322; genealogy of chiefs, 448; servile tribes, 202; liberation of slaves, 410, 413; dances, 211; the country of the Monbuttu, 191, 200, 201, 442
Monkeys, 101, 292; *see* Aonix, Baboon, Cercopithecus, Chimpanzee, Colobus, Theropithecus
Montij, dist. (6° 47′ N. 29° 33′ E.), 334
"Moringa," a tree yielding oil, 418
Morlabba, vill. (5° 33′ N. 30° 39′ E.), 308
Mormyrus (a fish), 175
Moro, mt. (2° 37′ N. 32° 33′ E.), 249, 278, 279, 288
Moru, dist. and tribe (5° N. 30° E.), 305, 313–314, 320, 354
Moru-Kodo ("northern" Moru) (5° 40′ N. 30° 10′ E.), 313
Moru-Missa ("southern" Moru), 5° N. 30° E.), 313
Mosquitos, 334
Motacilla flava (yellow wagtail), 146
—— vidua, 146, 176
Mouse, *see* Georychus, Golundo
Mpafu-tree, (Canarium edule, Hook. fil.), 126, 380, 422, 459
Mparo-Nyamoga, capital of Unyóro (1° 28′ N. 31° 30′ E.), 59–69, 81
Mrisa, durrah beer, 519
Mreko, chief of Kahura (1° N. 32° 30′ E.), 31, 34, 40. 45, 46, 131
Mrūli (1° 39′ N. 32° 20′ E.), 25, 27, 28, 50, 72, 135
Msedyua, mt. (1° 52′ N. 32° 36′ E.), 282
Msige, interpreter, 68, 70, 72, 488
Msisi, river (1° 9′ N. 30° 40′ E.), 167
Msongua (1° 51′ N. 30° 50′ E.), 151
Msvar, dist. (2° N. 31° E.), 150
Mtésa, 46–49, 68, 115, 117, 146, 472; biography, 514
Mtundwa, hill (0° 17′ N. 32° 37′ E.), 124
Muambia, dist. or chief (0° 37′ N. 32° 40′ E.), 44
Mubisi, *see* Sandi
Mudir, "director," governor of a district
Mueng, dist. (1° 10′ N. 30° 50′ E.) 97, 508
Mugaya, dist. (1° 30′ N. 31° 30′ E.), 97
Muggi, sta. (4° 8′ N. 31° 42′ E.), 6, 484
Mukana (Anfina's island) (2° 16′ N. 32° 18′ E.), 287
Mukomere, vill. (2° 16′ N. 32° 17′ E.), 287
Mula Effendi, a worthless officer, 413, 414
Mumbere, *see* Mambere
Mundar, *see* Mandari
Mundia, mt. (4° 11′ N. 31° 1′ E.), 361
Mundu (or Bamba) (4° 5′ N. 29° 45′ E.), 192 (cannibals), 380, 440, 441
Mungaya, dist. (=Mugaya?), 180
Mungo, hill (4° 42′ N. 29° 47′ E.), 381
Munza, late Monbuttu chief (3° 28′ N. 27° 58′ E.), 193, 204, 439, 446, 447 (his daughter)
Murchison Bay or Mwáru Luajeri (0° 10′ N. 32° 40′ E.), 126
Murjan Aga, 478–80
Musa-Bey, an energetic officer, 344
Musa ensete (a banana), 20, 39, 296, 363, 423
Musanga (trumpet-tree), 195
Muscovy glass, 216, 290
Mushrooms, 184; *see* Fungi

Musicapa (fly-catcher, bird), 141
—— infulata, 167
Musingok, dist. (4° 40′ N. 33° 50′ E.), 293, 415
Musk-rat (Myogale), 396
Musophaga Rossæ, Gould (a plantain-eater), 200, 400, 520
Mustapha Aga, 466
Mutongali (plur. batongali), a chief of the second rank
Mutua, island (2° 15′ N. 32° 17′ E.), 286, 287
Mvolo or Lesi, sta. (6° 3′ N. 29° 56′ E.), 325, 326
Mwanga, king of Ugánda, 515, 489, 522
Mwáru Luajeri or Murchison Bay (*q. v.*)
Mwénge (banana wine), 74, 76, 518, 519
Mwerango, river, *see* Mianja
Mwutan Nzige ("locust-killer"), *see* Albert Lake
Mycteria senegalensis (Yabirus stork), 98, 166
Myogale moschatus and M. pyrenaica (musk-rats), 396
Myrianthus (a tree), 195
Myristica (a fruit-tree), 199
Myrmecocichla nigra (a wheat-ear), 366, 367

Naduima, mt. (0° 41′ N. 32° 40′ E.), 42
Naluvali Island (0° 5′ N. 32° 38′ E.), 127
Nambia, khor (4° 22′ N. 30° 23′ E.), 372
Nam Lau (river of Lau) or Ayi (*q. v.*)
Namo, mt. (3° 32′ N. 32° 12′ E.), 265
Naponga, brook (3° 27′ N. 28° 32′ E.), 187
Nasirie, dist. (0° 30′ N. 32° 40′ E.), 144
Natefar, spring (2° 50′ N. 34° 20′ E.), 252
Nava, river (source 2° 15′ N. 27° 50′ E.), 191
Ndabiri, division of the Makraká, 376
Ndirfi, sta. (4° 7′ N. 30° 21′ E.), 362, 439
Ndoruma's (4° 50′ N. 27° 25′ E.), 460, 461
Nectarinia (sunbirds), 200
—— cyanocephala, 404
—— pulchella, 142
Nectodonts (an insect), 146
Nedada, vill. (3° 27′ N. 28° 52′ E.), 187
Negunda (3° 21′ N. 28° 40′ E.), 189, 201, 450
Nenja, vill. (3° 20′ N. 28° E.), 195, 445
Neophron percnopterus (Egyptian vulture), 395
Neotragus, *see* Antilope
Nepa (water-scorpion), 146
Newts, *see* Triton
Ngele, vill. (4° 46′ N. 29° 28′ E.), 384
Ngirua, mt. (4° 40′ N. 20° 16′ E.), 383
Ngorre, khor (5° 18′ N. 30° 53′ E.), 307
—— vill. (6° 18′ N. 29° 47′ E.), 329
Ngunyi, vill. (5° 34′ N. 30° E.), 352
Niambara, *see* Nyambara
Niam-Niam or Nyam-Nyam, *see* Zandē
Nicotiana rustica, 32, 40, 267, 313, 333, 385
—— Tabacum, 32
—— virginiana, 40, 77, 78, 285, 385
Nightingale, *see* Luscinia
Night-jar, *see* Macrodipterix, Cosmetornis
Night-shade, *see* Solanum
Nigrita Arnaudi (a bird), 357
Nile, river, native names, 281 ; in Shifalú, 287 ; *see also* Bahr-el-Jebel
Nisus sp. (sparrow-hawk), 227
Nkole, country (0° 30′ S. 30° 30′ E.), 112, 489
Noggaras, the kettledrums of the Waganda
Nomayo, or Bomokandi, river, 447
Nubar Pasha, 495, 498
Nuēr, tribe (8° 40′ N. 31° E.), 339
Nugger (Arabic), a sailing barge
Numa, rivulet (3° 23′ N, 28° 45′ E.), 188
Nur-Bey, a scamp, xvii., xx., 69, 485, 486
Nurvira, mt. (2° 58′ N. 32° 3′ E.), 162
Nutmeg, in Ugánda, 123, 442
Nyaj, khor (2° 6′ N. 32° 19′ E.), 283
Nyambara (Nyangbara), tribe (4° 48′ N. 31° 7′ E.), 299, 303–305, 369
Nyambue, khor (2° 10′ N. 32° 17′ E.), 286
Nyamere, island (2° 3′ N. 32° 35′ E.), 281
Nyamini, khor (4° 57′ N. 31° 35′ E.), 301
Nyam-Nyam ("cannibals"), 3 ; *see* Zandē
Nyamusa, dist. (6° N. 30° 20′ E.), 321
Nyang, vill. (6° 37′ N. 29° 11′ E.), 346
Nyangali, mt. (5° 23′ N. 5° 35′ E.), 356
Nyangwe, on Congo (4° S. 27° E.), 427
Nyapu, tribe (3° 30′ N. 27° 55′ E.), 196, 203, 441
Nyedi, mt. (6° 13′ N. 29° 50′ E.), 328
Nyefo, mt. (4° 5′ N. 31° 35′ E.), 140
Nyelea, vill. (2° 10′ N. 31° 3′ E.), 151, 152
Nyerkani, mt. (5° 5′ N. 31° 45′ E.), 353
Nyiri, mt. (3° 50′ N. 31° 50′ E.), 140
Nymphæa, *see* Water-lily
Nyone, hill (3° 11′ N. 32° 35′ E.), 273
Nyori, dist. (5° N. 31° 40′ E.), 299
Nyussi-Msisi, river (1° 9′ N. 30° 40′ E.), 167
Nzolo, tribe of the Kibali, at Lógo, 439

Obbi, Mádi name for the Welle, 187
Obbo, sta. (4° 7′ N. 32° 29′ E.), 256, 267 297

Ocymum canum, L., the "toolsie" of India, order Labiatæ, 184
Odia, mt. (3° 50′ N. 33° 7′ E.), 242
Odiak, vill. (3° 1′ N. 32° 26′ E.), 275
Odina (a gum-yielding tree), 400
Odiri, vill. (3° 41′ N. 32° 12′ E.), 264
Odukwe, vill. (3° 50′ N. 32° 1′ E.), 261
Ofo, khor (5° 34′ N. 29° 42′ E.), 353
Ogeloquer, khor (5° N. 33° 20′ E,), 293
Ogilli, mt. (3° 13′ N. 33° 12′ E.), 244, 249
—— vill. (4° 5′ N. 32° 10′ E.), 256, 297
Oil-palm, 190, 207 (Elaïs guineensis), 190, 207, 404, 424, 443
Okirri, *see* Ekara
Ojo, khor (5° 28′ N. 29° 46′ E.), 354
Okaga, mt. (3° 8′ N. 32° 59′ E.), 249
Okka, a weight, nearly three pounds, 374
Okkela, sta. (4° 42′ N. 32° 33′ E.), 222, 224, 229, 291
Okora, khor (3° 52′ N. 33° 3′ E.), 243, 244, 295
—— khor (3° 35′ N. 32° 38′ E.), 257
Olives, 457
Ombamba, vill. (4° 35′ N. 29° 12′ E.), 383, 513
Ombolokko, river (6° 10′ N. 29° 45′ E.), 350, 351
Oncoba (a fruit), 304, 306, 310
Ondebiri, vill. (4° 25′ N. 30° 10′ E.), 373
Ongolet, vill. (4° 40′ N. 32° 48′ E.), 234
Onions, 373
Oppei, mt. (3° 47′ N. 33° 10′ E.), 242, 296
Oppone, mt. (4° 41′ N. 32° 12′ E.), 219, 291
Oracles, 96
Ordeal, poison, 88
Oriolus Rolleti, Salvad, *see* Pogonorhynchus
Ortygometra egregia (Peters's crake), 149, 156
Ortygospiza atricollis (a finch), 56
Orycteropus æthiopicus (an ant-eater), 228, 401
Oryctes nasicornis (a beetle, family Dynastidæ), 146
Osman Effendi turns rebel, 475
Oso, mt. (5° 27′ N. 30° 1′ E.), 355
Ospreys, 343, *see also* Haliaëtus
Ostriches, 226, 251, 270, 402
Oteng, khor (4° 27′ N. 32° 58′ E.), 239
Otolicnus Galago (the Galago, a lemur), 332
Otongole, vill. (3° 2′ N. 32° 23′ E.), 107, 108, 276
Otsame, khor (3° 0′ N. 32° 8′ E.), 106
Ottelia (a water-plant), 12, 136
Otters, 121; *see* also Lutra
Ovidda, khor (4° 5′ N. 32° 20′ E.), 256
Owls, *see* Bubo capensis
Oxylophus (a bird), 394
Oysters, *see* Etheria

Paimol, mt., 249
Palæornis cubicularis (a parakeet), 57
—— torquatus (green parrot), 101, 353, 435
Pale, mt. (3° 23′ N. 33° 10′ E.), 244, 249
Palm-oil in Monbuttu, 200
Palm-wine in Monbuttu, 207
Palms, 444; *see also* Date-palm, Oil-palm, Dum-palm, Doléb, Calamus
Pameto, dist. near Labóre, 262
Pandanus (screw-pine), 380–382, 405
Panyatoli, vill. (2° 7′ N. 32° 17′ E.), 137, 283, 285
Papaw-tree (Carica papaya), 137, 373, 387, 423, 418
Papyrus, 11, 12, 53, 135, 136, 162, 278–280, 436, 450
Parakeet, *see* Palæornis
Parnassia palustris (an aquatic plant), 368
Parkia, *see* Bassia Parkii
Parra africana (African Jacana), 12
Parrots, 315, 317; *see* Agapornis, Palæornis, Pionias, Psittacus
Passer domesticus, L. (is really P. rufidorsalis), a sparrow, 293, 520
Passer Swainsonii (a sparrow), 245
Passion-flowers, 137, 268
Patokome, ford (6° 2′ N. 29° 57′ E.), 325
Paya, mt. (5° 36′ N. 30° 29′ E.), 311, 355
Pea, *see* Lathyrus, Voandzeia
Peaches, 457
Penicillaria, *see* Dokhn
Penthetria macroura (a widow-bird), 221, 254, 361, 369
Pentholæa clericalis (a bird), 366
Pentstemon, erroneous description of a Scrophuleriacea, 7, 131, 521
Pepper (Capsicum conicun), 75
Petherick, Mr. J., 324
Petunia (?), a nightshade, 111, 290, 330
Phalacrocorax africanus (cormorant), 166, 167
Phaseolus lunatus (Duffin bean), 75, 130
—— mungo (Mungo bean), 75, 80, 130
Phatages (Manis) Temminckii, 228
Philagrus melanorhynchus, 245
Phœnix, *see* Date-palm
—— spinosa (wild date), 53, 444
Pholidauges leucogaster (glossy thrush), 245
Phyllostrephus Sharpei, Sh. (a thrush), 399
Picus minutus (woodpecker), 56, 227
—— nubicus, 227

Picus schœnsis, 227, 520
Pidi, mt. (2° 35′ N. 32° 34′ E.), 279
Pigeons, 301, 379, 391; *see also* Treron
Pik, a measure, nearly two feet
Pile-dwellings, 319, 329
Pionias Meyeri (a parrot), 353
—— rufiventris, 399
Pipit, *see* Anthus, 142
Pistia (duckweed), 12, 136, 147, 185
Pitta angolensis (Angola magpie), 396, 397
Plantain-eater, *see* Musophaga, Schizorhis, Corythaix, Turacus
Platycerium elephantotis, Schw. (a lichen), 56, 125, 138
Plotus (darter), 144
—— Levaillanti, 166
—— melanogaster, 14
Plovers, *see* Ægialites, Hoplopterus, Hyas, Pluvianus
Plums, 457; *see also* Vitex
Pluvianus ægyptiacus (a plover), 102
Pogonorhynchus abyssinicus (a barbet), 227
· diadematus, 227
· Rolleti, 227, 520, 262
· bidentatus, 146
Poliornis rufipennis, Strick. (a buzzard), 394, 402, 406
Polygala (milkwort), 181
Pomegranates, 373, 418
Pondweed, *see* Potamogeton
Porcupines, 396; *see also* Atherura, Aulacodus, Hystrix
Poro, vill. (4° 17′ N. 30° 29′ E.), 370
Poroli, khor (2° 29′ N. 32° 28′ E.), 279
Portulaca oleracea, *see* Purslane
Potamochœrus penicillatus (a bird), 200
Potamogeton (pondweed), 136
Pottery in Unyóro, 85, 122
Pottokai, khor (5° 22′ N. 30° 48′ E.), 307
Prosopis (a plant), 363
Prostitution in Unyóro, 87
Protea, tree, 399
Protopterus (Lepidosiren) annectens, Ow., a fish, 137
Prout, Colonel, 4
Psittacus erythacus, L. (grey parrot), 57, 353, 399, 405
—— Timneh, 57
Ptilopachys ventralis ("rock-fowl"), 247, 273, 326, 342
Purslane (Portulaca oleracea), 74, 229
Pycnonotus niloticus (the Bulbul bird), 345
Pyrenestes ostrinus, L. (a finch), 404
Pytelia Monteirii, Hartl. (a finch), 404
Python, 47, 77, 265, 281, 332
Python africanus, domesticated, 339
Quail, *see* Coturnix
Quartz, 385
Rabbits, their introduction, 391
Radzi, khor (3° 12′ N. 31° 57′ E.), 104
Rafai Aga, his ill conduct, 374
Rahad (a loin-cloth, short apron), 6
Rains, in Unyóro, 34, 65, 108, 139, 189, 297
Rakhit Bay, 485, 486
Randia, a shrub, order Rubiaceæ, 299, 318
Rango, vill. (5° 45′ N. 29° 43′ E.), 352
Raphia (a palm), 187
Ras-el-Fil ("Elephant's Head") (2° 23′ N. 32° 27′ E.), 280
Ras-el-Maye or Modo (2° 19′ N. 32° 31′ E.), 280
Rasuba, khor (4° 41′ N. 29° 25′ E.), 383
Rattan (Calamus Rotang), 160, 190
Rauf Pasha, 433
Raven, 34; *see also* Corvus, Tmetoceras
Razzia (Arabic), a raid, plundering expedition
Redstart, *see* Ruticella
Rego, mt. (4° 25′ N. 31° 25′ E.), 357
Rejaf, mt. (4° 45′ N. 31° 32′ E.), 1
—— sta., 491
Rek, tribe (7° 30′ N. 29° 20′ E.), 339
Reko (Rego), mt. (4° 45′ N. 30° 57′ E.), 300
Rembeta, vill. (4° 25′ N. 30° 20′ E.), 372
Rembete, a division of the Makraká, 376
Remo, mt., or Mádi Lokoya (3° 51′ N. 32° 3′ E.), 255, 261, 262
Renga, *see* Irenga
Rengo, vill. (6° 13′ N. 29° 48′ E.), 328
Rice, 423, 418
Rihan Agas, commandant of Ladó, 482, 483, 500
Roku, mt. (5° 32′ N. 29° 56′ E.), 354
Rillek, hot spring (4° 52′ N. 30° 57′ E.), 158
Rimo, sta. (4° 15′ N. 30° 33′ E.), 368, 370; defeat of rebels, 481, 484
Rinyak, vill. (4° 39′ N. 32° 12′ E.), 219, 290, 291
Rionga, chief of Shifalú, 136, 281
Rizegat, Arab tribe (9° 30′ N. 27° 30′ E.), 437
Roa, river (6° 59′ N. 28° 58′ E.), 343, 382
Rochámа, chief of Shúli, 106, 107, 271, 273, 275
Rock-fowl, *see* Ptilopachys
Rodon, khor (4° 38′ N. 32° 17′ E.), 220, 221
Rokko, Zandē designation of bark cloth, 210, 211
Rōl, dist. and tribe (7° 20′ N. 29° 50′ E.), 322, 513
Roller (bird), *see* Eurystomus, Coracias
Rom, dist. (3° 25′ N. 33° 45′ E.), 252
Ronga, vill. on Lake Albert (1° 46′ N. 3° 21′ E.), 159

Rubaga (0° 19′ N. 32° 37′ E.), 112, 128
Rubber plants, 347
Rugoi, hill behind Kibíro, 175
Rugong, chief of Liria, 216, 219, 220
Ruhanda or Ruando, country (1° 30′ S. 30° E.), 123, 285
Ruku, vill. (6° 8′ N. 29° 53′ E.), 327
Rumbēk, sta. (6° 47′ N. 29° 33′ E.), its history, 334; condition, 335; slave-nest, 336; captured by the Dinka, 450; evacuated, 468, 471
Ruticilla phœnicurus, L. (redstart), 395

SABI (Sabbi), zer. (6° 10′ N. 28° 56′ E.), 383, 453
Sagara, vill. (2° 7′ N. 32° 27′ E.), 133
Sage (salvia), 362
Said Bargash, Sultan of Zanzibar
Saleh Hakim, his misdeeds, 322
Salih Aga, a brave soldier, 434
Salpornis Emini, Hartl., erroneously described as a Certhia, 520
Salt, 74, 121, 141, 150, 172, 176, 508
Salvia (sage), 362
Sandi, or mubisi (banana wine), 34, 76, 518
Sandpiper, *see* Actitis
Sanga Kebir, the "great" chief (3° N. 27° 45′ E.), 199, 205, 448
—— Mambele or Zurar, the "little" (2° 10′ N. 28° 7′ E.), 205, 447, 448
Sanseviera, plant, yielding fibre, order Liliaceæ, 291, 302, 347
Sarcidiornis melanotus (knob-billed goose), 233
Sarciophorus (a lapwing), 327
—— tectus, 300
Sarcocephalus, a scrubby tree, order Rubiaceæ, 187, 265, 306, 383, 400
Satti Effendi, betrays Lupton, 467
Sayadin, sta. (5° 26′ N. 29° 43′ E.), 353, 471
Scabiosa, order Dipsaceæ, 182
Schizorhis (plantain-eater), 34, 261, 315
—— leucogastra, Rüpp., 236, 399, 402
—— zonura, 102, 263, 402
Schnizleinia, sp. n., *see* Lakorta-tree
Schuver, Jean Maria (b. Feb. 26, 1852, murdered by the Dinka, April 1883), 457
Schweinfurth, 200, 447
Sciurus (Xerus) leucumbrinus (a squirrel), 234, 326
Scopus umbretta (tufted umbre), 12, 70, 176, 215, 290
Scorpions, *see* Nepa
Screw-pine, *see* Pandanus
Seba Jezair, island (4° 38′ N. 31° 37′ E.), 2
Secretary-bird (Gypogeranus serpentarius), 402
Selaginella, order Lycopodiaceæ, 195, 362
Sempa, mt. (0° 39′ N. 32° 40′ E.), 43
Sennār, town (13° 40′ N. 34° E.), 393, 434
Sereten, mts. (2° 55′ N. 33° 16′ E.), 240, 295
Serpents, *see* Snakes
Serval, or bush-ant, 223
Semme (semsem), 8, 13, 100, 101, 311, 506
Sesse, islands in Victoria Lake (0° 20′ N. 32° 40′ E.), 518
Shagga, khor (2° 35′ N. 32° 20′ E.), 279
Shakka, in S. Kordofan (10° 52′ N. 26° 35′ E.), 486
Shambe, sta. (7° 5′ N. 30° 57′ E.), 436, 470
Sheep, 150, 226
Shells, 159, 172, 176; *see also* Achatina
Sherifi's zeriba, *see* Gōk-el-Hassan, 453
Shifalú (Chopi) (2° 10′ N. 32° 20′ E.), 17, 97, 284, 285
Shikat (2° 33′ N. 32° 33′ E.), 279
Shíluk, tribe (*see* map), 150, 435
Shir, tribe (5° 30′ N. 31° 50′ E.), 369, 437
Shrike, *see* Lanius, Urolestes, Dryoscopus, Telephonus
Shua, or Ledovan (3° 5′ N. 32° 20′ E.), 109, 272
Shubra, a suburb of Cairo, 497
Shukurie, tribe (16° N. 34° E.), 434
Shúli, tribe (3° N. 32° 30′ E.), 106–108, 244–245, 266–274; politeness, 272; dress, 108, 270, 274; ornaments, 267, 270; arms, 247; frisures, 267; painting, 274; houses, 108, 244, 266, 271, 274; women, 266, 271; agriculture, 266; pottery, 266; cattle, 244; smiths, 270; hunting and hunting-trophies, 268, 271; votive trees and huts, 108, 216
Siluridans (fishes), 141
Siri, khor (3° 12′ N. 31° 58′ E.), 104
Sizygium, a tree, order Myrtaceæ, 262, 310
Skin disease, 443
Slatin, Colonel, 430
Slave-trade, 124, 322, 330, 420, 425, 481, 484, 505
Slave-raids, 300, 411, 412
Slaves, liberation of, 315, 321, 336
Smallpox, at Wádelai, 501
Smiths, 25, 81, 244, 270
Snails, *see* Clausilia
Snakes, 146, 226, 339; *see also* Echis, Python, Typhlops

Sobat, river and sta. (9° 20′ N. 31° 45′ E.), 11, 393, 435, 470
Sofi, dist. and tribe (6° 10′ N. 29° 55′ E.), 327, 328
Sogodi, swamp (4° 41′ N. 32° 27′ E.), 122
Solanaceæ (nightshades), 153
Solanum, 75, 103, 373
—— coagulans, 8
—— melongena (egg-plant), 320
—— lycopersicum, *see* Tomato
Soldiers, Egyptian, 497, 502
Somal, tribe in North-east Africa, 400
Songa, chief of Mahagi, 168
Songa, sta. (1° 57′ N. 31° 3′ E.), 510, 514
Sorghum vulgare, *see* Durrah
—— saccharatum (sweet sorgho), 30
Soymida, a tree of the Melia, 262
Sparrows, *see* Chrysospiza Passer
Spathodea, a tree, order Bignoniceæ, 19, 54, 125, 275, 363
Speke, Captain, 73, 92
Spermestes cucullatus (a finch), 56, 146, 375, 399
—— caniceps, 402
Spermospiza (a bird), 200
—— hæmatina, Vieill., 404
Spizaëtus occipitalis (eagle hawk), 142
Spondias (hog-plums), 222
Sporothlastes fasciatus (a finch), 56
Sports, *see* Hunting
Squirrels, 200, 234, 326; *see also* Anomalurus, Funambulus, Sciurus, Xerus
Stanley's expedition, xxxii., 509
Stations, daily routine, 521
Stenostira plumbea (a bird), 221
Sterculia (a tree), 384
Stereospermum (a butter tree), 341, 400
Sterna (terns), 145
Storks, 292; *see also* Anastomus, Ciconia
Suakin, town on Red Sea, 475
Sugar-cane, 46, 77
Sunbirds, 142, 388; *see also* Nectarinia
Sunt (Arabic), wood of the Acacia nilotica
Swan (Plectropterus Gambensis), 233
Sweet potatoes (Batatas edulis), 75, 206, 250, 271, 275, 286
Swift, *see* Cypselus
Sycamores, 291
Syphilis, 33

Tabaru, khor (2° 20′ N. 32° 22′ E.), 280
Tabora (5° S. 32° 50′ E.), 116
Tafari, khor (5° 18′ N. 30° 53′ E.), 307, 357
Tahir Aga, 473
Taka, vill. (0° 47′ N. 34° 10′ E.), 97
Takalla, dist. (3° 55′ N. 32° 20′ E.), 262
Talabún, Sudân name for Eleusine cora-
Tami, vill. (0° 50′ N. 32° 32′ E.), 38
Tamarinds, 2, 12, 107, 135
Tamarisks, 401
Tambira, sta. (2° 52′ N. 30° E.), 364, 429, 439
Tantalus (bird, family of the herons), 4
Tárangole, vill. (4° 30′ N. 32° 53′ E.), 235, 293, 294
Tarbush, a cap, often named after Fez in Morocco
Tari, khor (2° 7′ N. 32° 18′ E.), 283
Tawfs (sedge-islands), 1, 14
Taya, mt. (5° 34′ N. 30° 14′ E.), 355
Telephonus minutus, Hartl. (a shrike), 399
Telphusa (fresh water-crab), 375
Tendia (4° 12′ N. 29° 52′ E.), 439
Tephrosia, a bush, order Leguminosæ, a mash from the leaves of which is used to destroy fish, 101, 276, 278, 362, 388
Termayok, dist. (2° N. 34° E.), 252, 415
Termes bellicosus (white ant), 329
Terminalia, order Combretaceæ, 107, 139, 306
Termites, *see* Ants, white
Terns, *see* Sterna, 145
Terpsiphone (Paradise fly-catcher), 227
Thamnolæa (a chat), 141
Theropithecus (a monkey), 401
Thomson, Mr. Joseph, 472, 509
Thrush, *see* Lamprocolius, Pholidauges, Phyllostrephus
Tia, mt., or Lomu (4° 1′ N. 33° 10′ E.), 242
Ticks, 155
Times newspaper, 496
Tingazi, vill. (3° 20′ N. 27° 57′ E.), 194, 196, 445
Tingtum, vill. (3° 10′ N. 32° 57′ E.), 246
Tinna, mt. (2° 50′ N. 28° 45′ E.), 191, 201
Tinnea æthiopica (a plant), 326
Tipalanga, khor (3° 56′ N. 31° 54′ E.), 260
Tmetoceras abyssinicus (horned raven), 104, 332
Toa, vill. (2° 10′ N. 31° 20′ E.), 148
Tobacco, 32, 40, 77, 78, 112, 206, 231, 285, 313, 333, 385, 449, 506
Tobe, mt. (5° 48′ N. 29° 43′ E.), 353
Tobo (4° 8′ N. 30° 17′ E.), 439
Tochi, khor (2° 33′ N. 32° 27′ E.), 279
Toe, mt. (3° 42′ N. 34° 12′ E.), 241, 295
Togodo, mt. (5° 30′ N. 30° 29′ E.), 355
Togul (tokul), Nubian, a round straw hut, with a conical roof
Tollogo, mt. (4° 40′ N. 32° 9′ E.), 217, 218, 290
Tomatoes (Solanum lycopersicum), 100, 275, 366, 423

Tomaya, sta. (4° 33′ N. 29° 52′ E.), 378, 452
Tonj, sta. (7° 13′ N. 28° 43′ E.), 469
Torcus erythrorhynchus (a bird), 20
Torkola, mt. (4° 45′ N. 32° 2′ E.), 216, 290
Torre, khor (4° 35′ N. 30° 28′ E.), 373, 388
Toru, country (0° 40′ N. 30° 20′ E.), 92, 154
Trachyphonus margaritatus (a barbet), 56
Tragelaphus scriptus (an antelope), 71, 102, 121, 133
Treron nudirostris (a pigeon), 159
Tricholæma (a bird), 200
Tricholais caniceps (a bird), 399
—— elegans, 252
Trichophorus (a bird), 200, 404
—— flavigula, Cab., 399
Triton, n. sp. (a newt), 367
Troglodytes niger, *see* Chimpanzee
Tu, river (4° 27′ N. 33° 22′ E.), 239, 293
Tuj (Tuich), tribe (7° N. 31° 10′ E.), 470
Tunguru, island (2° 10′ N. 31° 19′ E.), 167
Tunjuru, swamp (5° 57′ N. 30° 15′ E.), 323
Turacus giganteus (the turaco, a bird), 200, 404, 520
Turkan, country (2° 40′ N. 34° 30′ E.), 159, 252, 269, 415
Turnix lepurana, Sm. (Kurrichaine hemipode), 157, 394
Turtles, 167
Turtur albiventris, semitorquatus, and senegalensis (turtle-doves), 174, 385
Twins, 84, 209
Typhlops Schlegelii (a snake), 228, 375

Uallo, vill. (3° 40′ N. 32° 52′ E.), 247
Uddu (Buddu), a district of Ugánda (0° 30′ S. 31° 45′ E.)
Ugánda, kingdom north of the Victoria Lake; war with Unyóro, 498, 501; treatment of foreigners, 516, 522; *see also* Wagánda, Mtésa, Rubaga, &c.
Ugungu, vill. (0° 43′ N. 32° 32′ E.), 130
Ui, mt. (5° 23′ N. 30° 28′ E.), 356
Ukamba, country (2° S. 38° E.), 397
Ulikare, vill. (4° 51′ N. 32° 4′ E.), 216
Umbre, *see* Scopus
Um-dikdik, *see* Antilope hemprichiana, 222
Umiro, country (2° 20′ N. 33° E.), 97, 251, 415
Ummoda, hill (3° 44′ N. 32° 29′ E.), 255
Unyama, river (mouth 3° 35′ N. 32° 5′ E.), 11, 99, 106, 109
Unyóro (1° N. 31° E.), the country of the Wanyóro (*q. v.*)
Uōko, river (6° 10′ N. 29° 45′ E.), 350
Uong (Wong), vill. (3° 42′ N. 32° 55′ E.), 246, 275
Upupa epops (Hoopoe), 245
Uræginthus phœnicotis, Swns. (a finch), 56
Urbare, vill. (4° 51′ N. 31° 46′ E.), 215
Urginea, a bulbous plant, order Liliaceæ, 124
Urolestes (a shrike), 252
Usavara, vill. (0° 13′ N. 32° 41′ E.), 126
Usóga (0° 30′ N. 31° E.), 117, 197
Ushurïe (Arabic), "tithe-payer," 409
Usonda, vill. (2° 8′ N. 31° 38′ E.), 139
Usongora, country (0° N. 29° 45′ E.), 154, 507
Usukuma, country ("north" of Unyanyembe, south of Victoria Lake), 494
Uyugu, mt. (3° 8′ N. 32° 58′ E.), 249
Uyui, vill. (4° 52′ S. 33° E.), 116
Uzinza, country (2° 30′ S. 32° 30′ E.), 122

Valiabantu ("cannibals"), 76, 90
Vakil, agent, lieutenant
Valani, mt., *see* Kelen
Vallisneria, an aquatic plant, 12, 136
Vanellus (lapwing), 4
Varan (a lizard), 100
Vari, vill. (5° 26′ N. 30° 27′ E.), 356
Varingo, khor (2° 3′ N. 31° 53′ E.), 139
Vatako, sta. (3° 50′ N. 30° 43′ E.), 367
Vatica (a plant), 306, 361
Vatti, mt. (4° 10′ N. 30° 10′ E.), 365
Vegetables, 419, 420
Verbayo, vill. (3° 1′ N. 32° 25′ E.), 276
Veya, or Vio, mt. (4° 42′ N. 31′ 30′ E.), 300
Victoria Lake (Victoria Nyanza), 126
Vidua principalis (common widow-bird), 142
Vigna sinensis (lubia of the Arabs, a bean), 8, 75, 288
Vine, 249, 287, 423, 457
Vita Hassan, the apothecary, 493–495
Vitex (wild plum-tree), 287, 383, 106, 107
Voandzeia subterranea ("mpande," a pea), 80, 129
Vorolo, dist. (3° 55′ N. 32° 10′ E.), 262
Vossia, a grass, 12, 383
Vossion, Mons. (French Consul at Khartúm, now in Philadelphia), 429
Votive trees and huts, 108, 216, 245, 266
Vultures, 125, 406; *see also* Neophron

Wadelai, sta. (2° 48′ N. 31° 30′ E.), 4, 13, 152, 485, 510

Wagánda, the people of Ugánda, 29, 38, 39, 45, 67, 88, 111, 119
Wagtails, *see* Budytes, Motacilla
Wahúma, Wawitu, or Watusi, tribe of herdsmen, 35, 37, 43, 82, 92, 125, 130, 284, 508, 517 (pedigrees)
Wai, a large river flowing west to Welle, 160
Waj, Alwaj, or Elwaj, a Dinka tribe (7° 50′ N. 29° 30′ E.), 339
Wakonjo, tribe (south-east of Albert Lake?), 508
Wakori, tribe (0° 20′ N. 34° E.), 505
Wallace's zoo-geographical regions, 392, 404
Wamberi, a division of the Makraká, 376
Wamboga, *see* Mboga
Wandi, sta. (4° 16′ N. 30° 31′ E.), 370, 389, 465, 468, 481
Wandɔ, Mbio's brother, a Zandɔ̄ chief (original res. 4° 16′ N. 28° 8′ E.), 374, 421, 439
Wanyóro, people of Unyóro (1° N. 31° E.), 53–55, 73–97, 112–133; personal, 53, 73; extraction of teeth, 74; dress, 55, 120; houses, 55; food and drink, 74, 76, 78, 79; cannibalism, 77, 94; diseases, 94; birth, 83; twins, 84; graves, 93; matrimony, 82, 85, 90; prostitutes, 87; chiefs' wives, 77; slave-girls, 117; blood-brotherhood, 77; agriculture and cattle, 79, 80, 90; smiths, 81; bark cloth, 82; tanners, 81; pottery, 88, 122; markets and trade, 79, 111, 112; political institutions, 91; laws, 86, 88; poison ordeal, 88; home rule, 89. History of Unyóro, 92; war with Ugánda, 498, 499, 501; legends, 93–96; witches, 82; magic, 93; superstitions and divination, 94–96; geographical notes, 97
Warbler, *see* Aëdon, Cistiola
Warrafan, swamp (6° 36′ N. 29° 42′ E.), 333
Waru, mt. (5° 22′ N. 5° 35′ E.), 356
Wasawe, tribe, probably the Musawe of J. Thomson, who are *not* Masai (0° 40′ N. 34° 30′ E.), or the Masaba (1° 20′ N. 23° 20′ E.), 97
Wasóga (inhabitants of Usóga, 0° 30′ N. 31° E.), 117, 197
Wasongora, *i.e.*, inhabitants of Usongora (*q. v.*)
Water-lilies (Nymphæa), 12, 100
Water-melons, 145, 373, 419
Watusi, *see* Wahúma
Wau, sta. (7° 34′ N. 27° 52′ E.), 430, 464, 485, 496
Wawitu, *see* Wahúma
Wax-bill, *see* Amadina
Weaver-bird, 14, 34, 142, 258; *see* Hyphantornis
Welle ("river," Makwa of Zandɛ̄, Kibali of Monbuttu, Obbi of Mádi), 186, 187, 191, 201, 441
Werahanje, capital of Karagwa (1° 40′ S. 3° 2′ E.), 112
Wheat, 419
Wheat-ear, *see* Myrmecocichla
White Nile, ascent from Khartúm, 434
Wichwezi, aborigines of Unyóro, 92; soothsayers, 112, 137, 285
Widow-birds, 142, 379, 389; *see also* Euplectes, Penthetria
Wilson, Rev. Mr., at Rubaga, 49, 522
Wira or Vira, dist. (south of Bufi), 321
Wodbala, khor (3° 58′ N. 32° 51′ E.), 247
Woll, tribe (3° 10′ N. 33° 15′ E.), 244
Woodpeckers, in Unyóro, 56; *see also* Picus
Woratta, a people to the south of Kaffa, 512

Xanthorpia (bats), 221, 310
Xeropetalum, a plant, 368
Xerus leucumbrinus (a squirrel), 227
Xilopia æthiopica (a plant with aromatic husk), 123, 190

Yabirus, *see* Mycteria senegalensis
Yalo, river, also known as Aire, Ire, Nam Rōl, or Gel (source, 4° 30′ N. 29° 53′ E.), 325–327, 333, 353, 354, 380, 386, 387
Yam (Dioscorea alata) 106, 260, 313, 449
Yambuya, vill. (1° 10′ N. 24° 50′ E.), xxii.
Yangara, a Monbuttu chief (at Nenja, 3° 20′ N. 28° E.), 195, 205, 206, 445, 446, 448
Yei, river, *see* Ayi
Yembe, khor (4° 2′ N. 30° 40′ E.), 368
Yere, vill. (5° 35′ N. 30° 13′ E.), 354
—— caverns (5° 48′ N. 30° 22′ E.), 318
Yibi, khor (4° N. 32° 4′ E.), 257
Yodzi, dist., near Labóre, 262
Yuaia, vill. (3° 42′ N. 32° 30′ E.), 254, 267
Yuba, khor (3° 15′ N. 31° 57′ E.), 100
Yussuf Pasha Hassan, 413, 433–435

Zandé or Nyam-Nyam, tribe (*see* map), 374, 439 (chiefs), 451; *see also* Makraká, Banjia, Iddio
Zanga, sta. (5° 4′ N. 30° 45′ E.), 357
Zanzibar traders in Unyóro, 67; *see* Arabs
Zea mays, *see* Maize

Zebras, 222, 228, 274; *see also* Equus
Zemio, a Zandé chief (5° 32′ N. 25° 40′ E.), 452, 454
Zeriba, a stockade
Zibēr Pasha, 469
Zindiru, hill (4° 30′ N. 31° 30′ E.), 358
Zinwe, brook (3° 25′ N. 28° 48′ E.), 188
Zizygium, a bush, 262, 310
Zizyphus, a tree, the mashed fruit of which causes fish to rise, 182, 262, 291, 299, 318, 400
Zonogastris phœnicoptera (a finch), 252
Zosterops senegalensis (a bird), 252
Zummo Peak (4° 9′ N. 33° 46′ E.), 241, 295
*Zygæna, a butterfly, 325

THE END.

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